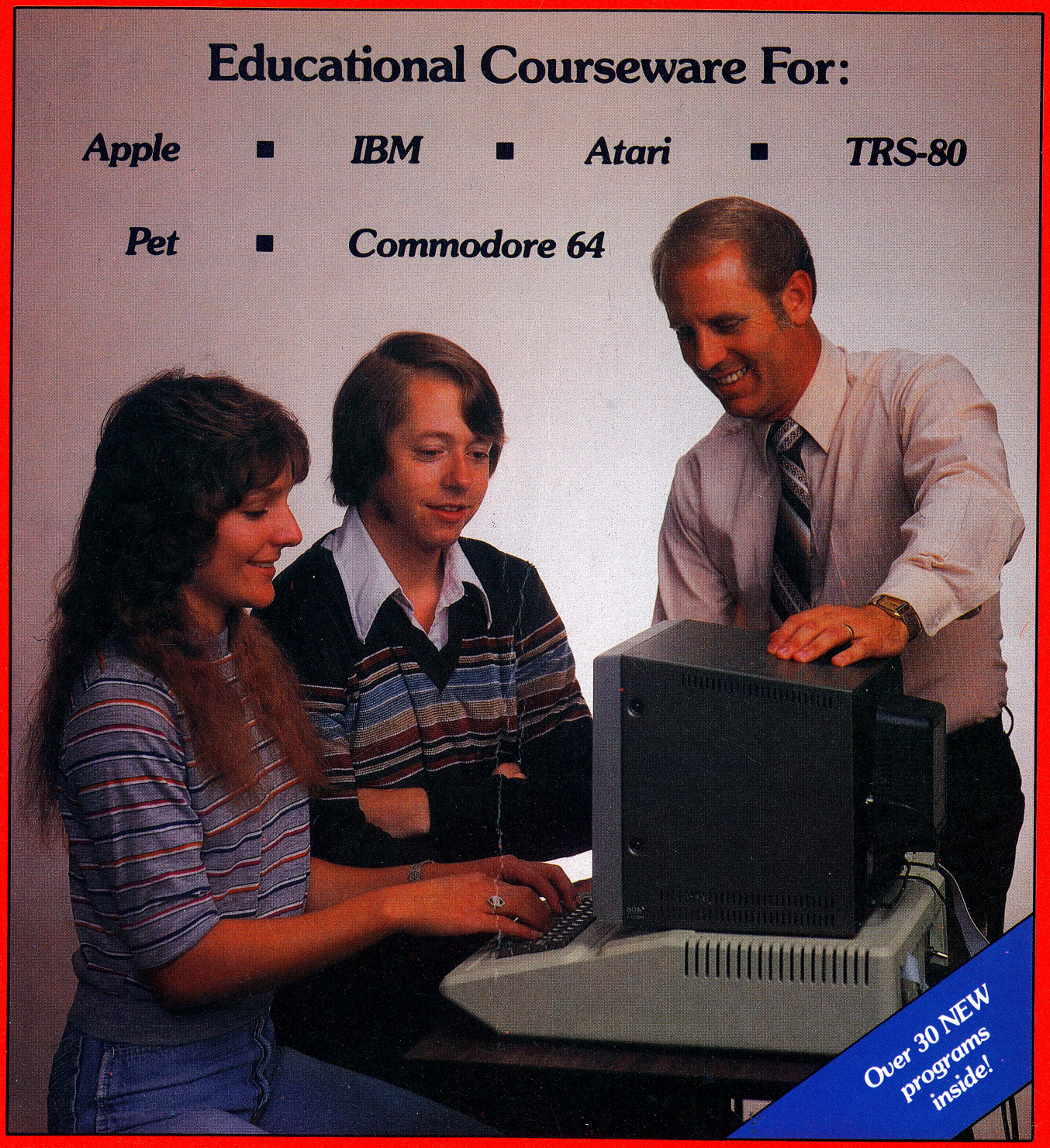
Selected Microcomputer Software

Secondary & College



OPPORTUNITIES FOR LEARNING, INC.

1984

Educational computing has come of age in 1984, with more computers and courseware available than ever before. With so much software to choose from, we at Opportunities for Learning feel that we can best serve you by presenting our Selected Microcomputer Software catalog in two editions, *Elementary* and *Secondary & College*. We hope this will make it easier for you to find just the materials that you are looking for. If you have one edition and would also like the other, just let us know and we'll send it to you. And as always, your satisfaction is quaranteed on any purchase from our catalog.

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SOFTWARE COMPATABILITY

The software in this catalog is designed for the Apple[1], TRS-80[2], Pet[3], Commodore 64[3], Atari[4], and IBM PC[5] microcomputers, as indicated for each product. To the upper right of each product description you will find symbols designating on which computers the program will run, so that you may see at a glance what is available for your machine. The symbols are:

Programs with the Apple symbol are designed for use with the Apple II, Apple II+, Apple IIe, and Franklin computers. Some programs require the "Caps Lock" key to be engaged on the Apple IIe. All programs run on DOS 3.3. No Apple III or Lisa programs are included in the catalog.

Unless otherwise indicated, all TRS-80 cassette programs will run on the Model I, the Model III, and the Model 4. The disk programs will run on the Model III and the Model 4 only. Some disk programs may require the TRSDOS Convert program from Radio Shack. No Color Computer, Model II, Model 16, or Model 100 programs are included in the catalog.

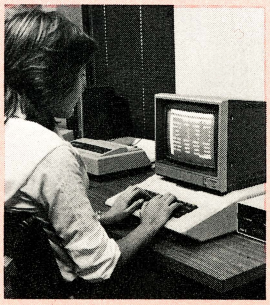
All Atari programs are compatible with the 400, 600XL, 800, 800XL, 1200XL, 1400XL, and 1450XLD computers.

All Pet programs run on either the 2001 series or the 4016/4032 series of computers. No VIC-20 programs are included in the catalog.

64 — All Commodore 64 programs run on the Commodore 64 and the Pet 64. Some programs may require the Pet Emulator program from Commodore.

All IBM programs run on the IBM PC and PCjr.

1. A trademark of Apple Computer, Inc.
2. A trademark of Tandy Corporation.
3. A trademark of Commodore Business Machines, Inc.
3. A trademark of Atari, Inc.
5. A trademark of IBM, Inc.



Opportunities For Learning, Inc., publishes the following catalogs of instructional materials: • Selected Materials for Special Students • Selected Microcomputer Software • Selected Materials for Reading and Language • Selected Materials for Social Studies • Expanding Horizons: Materials for Gifted Students • and Much Ado About Math. Write for your free copies today!

Regarding Copyright Laws Related to Microcomputer Programs

Legal opinion regarding application of copyright laws states that work in any format (print, cassette or disk) cannot be reproduced or distributed without prior authorization of the copyright owner. It would be an infringement of copyright to reproduce copies from an original cassette or disk in lieu of purchasing additional sets, and any person or institution which makes such unauthorized copies could be prosecuted under existing copyright laws. If multiple copies of any microcomputer program are needed, please contact Opportunities for Learning, Inc. for information on how such permission can be requested from the copyright owner.

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Computer Programming and Literacy

I SPEAK BASIC

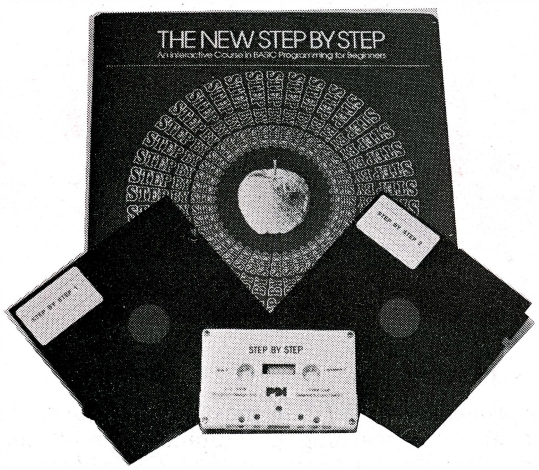
Here is a field-tested computer literacy course that introduces students to BASIC language programming and requires no previous computer experience on the teacher's part. This complete machine-specific text series introduces students to the programming and operation of the Apple, Atari, TRS-80, or Pet microcomputers. The Student Text features concise learning objectives, definitions and examples of key terms and basic concepts, in-class programming exercises, and assignments. The Classroom Sets include 20 Student Texts, 1 Teacher's Manual, and 1 Exam Unit. The Teacher's Manual contains help with lesson plans and presentation, and the answers to all exercises and quizzes on duplicator masters. Single copies of the Student Text are also available. Grade level is 7 to adult.

4J-6155 I Speak BASIC Set (Apple) $199.95
4J-6154 I Speak BASIC Set (TRS-80) $199.95
4J-6156 I Speak BASIC Set (Pet) $199.95
4J-6158 I Speak BASIC Set (Atari) $199.95
4J-6175 Extra Student Text (Apple) $9.75
4J-6174 Extra Student Text (TRS-80) $9.75
4J-6176 Extra Student Text (Pet) $9.75
4J-6178 Extra Student Text (Atari) $9.75

DISCOVER BASIC

This is a true "discovery learning" program that combines traditional expository teaching, interactive computer lab activities, reading assignments, drill and practice, and small group activities. The programming topics covered include input, output, variables, decisions, looping, strings, simulations, graphics, and tables; the student workbook also contains sample listings, written exercises, practice programming, simulation runs, and reading assignments. The teacher's guide contains all of the student workbook material, plus information on BASIC commands, program evaluation guidelines, and reproducible masters. The complete set consists of one student workbook; one teacher's guide; a demonstration disk with 34 programs that the student runs, then modifies according to instructions to discover how the programs can be changed; and a solution disk, with sample solutions to all of the supplementary programming problems. Extra copies of the student workbook are available separately. Designed for the Apple II with 32K and disk.

8B-30AD Discover Basic (Set) $74.95
8B-35AD Discover Basic (Student Workbook) $5.95



STEP BY STEP

This comprehensive set provides a complete course in BASIC programming for the beginner. Approximately 20 hours of instruction covers all of the important BASIC commands, from Print and Run to strings and arrays. The lessons are lively, interactive and user-friendly. The Apple version includes a special cassette for audio instruction and supplemental material covering sound, graphics, and animation. Back-up disks are included; extra workbooks are available separately. Available on disk for the Apple II with 32K and the Commodore 64 with 64K, and on cassette for the Pet with 8K. "...makes learning BASIC more interesting and more fun than some of the games out there!"—*SOFTALK.*

7B-110AD Step By Step (Apple) $99.95
7B-110CD Step By Step (C64) $59.95
7B-110PC Step By Step (Pet) $59.95
7B-11A Step By Step Workbook (Apple) $6.00
7B-11P Step By Step Workbook (Pet/C64) $6.00

STEP BY STEP 2

The sequel to STEP BY STEP, this course covers intermediate BASIC programming, machine language programming related to BASIC, and high-resolution graphics. The set consists of a workbook, two disks with back-ups, and four audio cassettes packaged in a special storage binder. Available for the Apple II with 32K and disk; grade level is high school to adult.

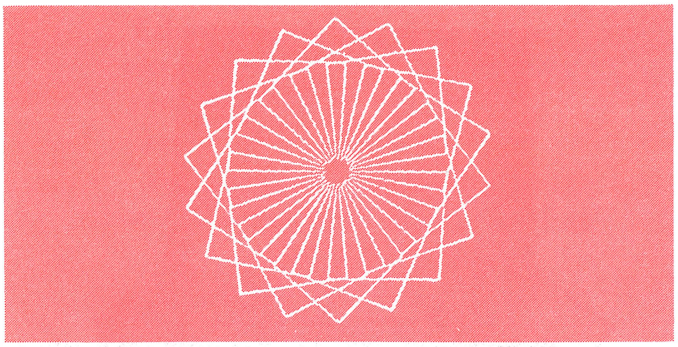
7B-112AD Step By Step 2 ..... $99.95
7B-12A Step By Step 2 Workbook $6.00

COMPUTER PROGRAMMING I & II

These two sound-filmstrip sets present a systematic approach to the essentials of programming in the BASIC language. COMPUTER PROGRAMMING I covers *Getting Started with the Computer; Mathematical Operations; Loops and Subroutines; Introduction to Original Programming;* and *Programming Techniques and Flowcharting,* and includes five filmstrips, five audio cassettes, and a teacher's handbook. COMPUTER PROGRAMMING II covers *String Functions; Data Handling and Arrays; Computer Graphics;* and *Advanced Mathematical Functions,* and includes four filmstrips, four audio cassettes, and a teacher's handbook. These two units can be used effectively to teach programming skills even without the availability of a computer.

3K-FSC397 Computer Programming I $99.50
3K-FSC384 Computer Programming II $83.00

Computer Programming and Literacy



TERRAPIN LOGO

Logo has proven to be one of the most popular learning tools yet developed for teaching programming and computer awareness. One of the primary features of this language is a unique system of graphics programming commands called "turtle graphics" that enables students to understand clearly the relationship between programs and computer operation. A small graphic "turtle" draws lines and shapes on the screen in response to student input; combinations of these commands can then be saved as larger commands. Complex operations can thus be built up one step at a time, allowing for endless possibilities in student creativity and exploration. Available for the Apple II on disk; please note that this program requires 64K RAM memory. A program disk, utilities disk, and a comprehensive manual are included.

8U-101AD Terrapin Logo $149.95

EXPLORING LOGO

NEW

64

Introduce your students to Logo with this challenging multi-media set of activity cards and computer software. Activity cards help students discover concepts in Logo programming, such as how to create graphics, work with words and sentences, use sound and music, perform computations, and more. The accompanying disk contains sample programs tied to the activity cards, and a reference card provides a summary of Logo commands. The Apple set is designed for use with the Terrapin and Krell versions of Logo; the Commodore 64 set for the Terrapin version. A teacher's guide is included; grade level is 6 to 9.

8K-1109AD Exploring Logo (Apple) $39.00
8K-1110CD Exploring Logo (C64) $39.00

APPLE LOGO PRIMER

Find out what an exciting and creative language Logo really is with this useful book. All of the major Logo topics are covered using step-by-step instructions, illustrative examples, and follow-up activities; common commands are listed on the inside of the front cover for quick reference. Learning Logo through discovery and exploration can be easy for everyone with this excellent volume.

8P-0314 Apple Logo Primer $14.95

BASIC CONVERSIONS HANDBOOK FOR APPLE, TRS-80, & PET

S

A complete guide to converting Apple programs to TRS-80 and Pet, TRS-80 programs to Apple and Pet, and Pet programs to Apple and TRS-80. Equivalent commands are listed for TRS-80 Level II BASIC, Applesoft BASIC, and Pet BASIC, as well as variations for the TRS-80 Model III and Apple Integer BASIC. Tips on graphics conversions are also included. 80 pages.

4J-5534 BASIC Conversions Handbook $9.95

MEET THE COMPUTER: BEGINNING BASIC

S

MEET THE COMPUTER: BEGINNING BASIC is an exceptional package designed to aid students in the development of computer literacy skills. The set contains 15 color-coded activity folders that teach a broad range of BASIC programming commands and functions. Each folder gives instructions and activities on a specific facet of programming, such as the PRINT statement, logical operators, or string variables. Included in the set are reproducible graphs and charts for plotting graphics and keeping records, a programmer's guide with extensive help and additional activities, and two quick-reference information cards. There is a specific set for each microcomputer listed below.

8K-966 Meet the Computer: Beginning (Apple) ... $29.00
8K-967 Meet the Computer: Beginning (Pet) $29.00
8K-968 Meet the Computer: Beginning (TRS) $29.00
8K-128 Meet the Computer: Beginning (Atari) $29.00
8K-1083 Meet the Computer: Beginning (IBM) $29.00

MEET THE COMPUTER: INTERMEDIATE BASIC

S

This multi-media package is a sequel to MEET THE COMPUTER: BEGINNING BASIC, and contains 21 color-coded activity folders that each cover more advanced topics such as arrays, graphics, input forms, and more. Each folder sets up problem situations and solves them to illustrate why and how to use functions and statements. Answers to the exercises and suggestions for classroom use are provided on the cassette or disk software that accompanies the package. Also included are reproducible graphs and charts for plotting graphics and keeping records. Available for the Apple II with 32K and disk, the TRS-80 with 16K and cassette, and the Pet with 8K and cassette.

8K-136 Meet the Computer: Intermediate (Apple) .$35.00
8K-143 Meet the Computer: Intermediate (Pet) $35.00
8K-144 Meet the Computer: Intermediate (TRS) ...$35.00

COMPUTER LITERACY

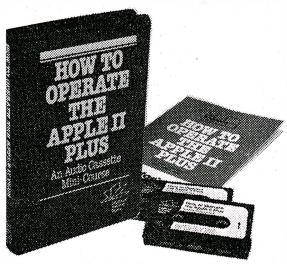
This comprehensive text is designed for use by the beginning student who has had no previous computer related coursework. Computers are discussed as problem-solving tools in both technical and non-technical terms. Topics covered include the *History of Computing; Computer Applications; Computer-Related Occupations; Computers and Society; Computer Components and Systems; Programming and Flowcharting;* and more. Exercises are included at the end of each chapter; extensive photographs, charts, and graphs illustrate and clarify the concepts covered in the text. A separate teacher's manual is available which includes answers for the exercises and material to assist the instructor. "... an important contribution...for all who need to become computer literate." — *ELECTRONIC EDUCATION.*

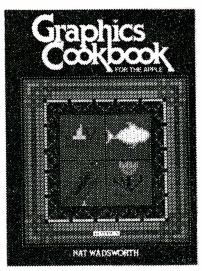
8B-SS14 Computer Literacy (304 pages) $15.95
8B-SS15 Computer Literacy (Teachers Manual, 196 pages) $7.95

HOW TO OPERATE THE APPLE II+/APPLE IIe/IBM PC

A time saving tutorial for the first-time user! Students learn at their own pace with this audio tape series, trying every command and observing the results. These sets will cut through the computer jargon and describe what each key does; what the essential commands are; how to load, run, and save programs; how to use the disk drive; and more. For those wishing expanded instruction, the flip side of the tapes feature information on using color video, a printer, a second disk drive, and game paddles. Available for the Apple II and Apple IIe using the System Master Disk; and for the IBM PC using the PC-DOS disk. "... a well-designed, well-executed, and thoughtful approach..." — *INTERFACE AGE.*

5P-18211 How to Operate the Apple II+ $57.00
5P-18311 How to Operate the Apple IIe $57.00
5P-18411 How to Operate the IBM PC $57.00





GRAPHICS COOKBOOK FOR THE APPLE

Learn how to use your Apple to "paint" shapes, objects, and letters in low resolution graphics with this informative text. After explaining methods and techniques for drawing pictures using Applesoft BASIC, the author provides a library of graphics programs. These begin with simple geometric shapes and progress to more complex, multi-colored drawings such as robots, trees, sailboats, and more. Tips on improving graphics programming techniques are also provided. An excellent introduction for students to the exciting world of computer graphics! 72 pages, 8½" × 11".

4J-6278 Graphics Cookbook $10.95

APPLESOFT LANGUAGE

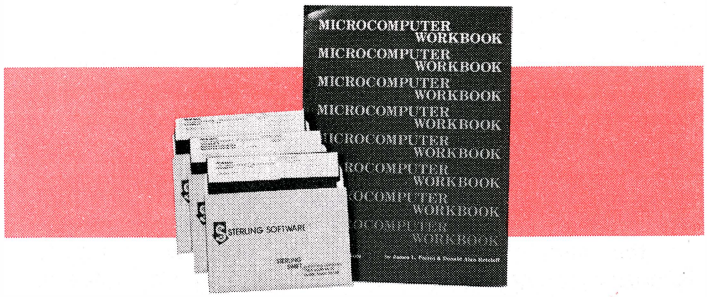
This self-paced, self-teaching book is written in easy-to-understand non-technical language. Anyone using an Apple II computer who would like to learn more about Applesoft programming, but does not want to wade through a technical manual, will appreciate this useful text. A number of ready to use programs are listed, and a section is included on the use of low-resolution graphics. 256 pages.

2B-22073 Applesoft Language $13.95

BASIC BASIC & ADVANCED BASIC

BASIC BASIC is a comprehensive beginner's text that covers all of the major commands and functions of the BASIC language. The topics covered include loops, strings, files, quadratics, polynomials, mat instructions, error diagnosis, flowcharts, and more. ADVANCED BASIC extends the concepts covered in BASIC BASIC, and includes coordinate geometry, area, sequences, series, graphing, simulations, and games. Sample programs are provided wherein each new statement is explained in context.

4J-5106-9 Basic BASIC $14.50
4J-5855-1 Advanced BASIC $13.95



HOW TO PROGRAM

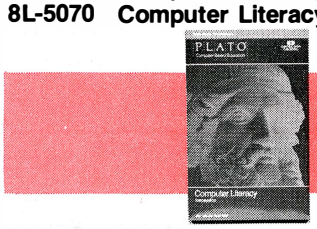
These workbook-based software programs are designed for "hands-on" use with the microcomputer. Programming background is not necessary, as the courseware parallels explanatory chapters in the workbooks. These comprehensive sets give students the opportunity for learning the BASIC language in a computer assisted instructional mode; topics covered include program input and branching commands, for-next loops, arrays, character strings, functions, subroutines, and more. The HOW TO PROGRAM set contains twelve lessons and one student workbook, and is available on disk for the Apple II and the TRS-80 with 32K, and the Commodore 64 with 64K; and on cassette for the TRS-80 and the Pet with 16K. Extra workbooks are available separately. "...a well-organized, clearly presented, and thorough introduction to the fundamentals of microcomputer programming." — *ELECTRONIC LEARNING.*

8B-700AD How to Program Set (Apple) $74.95
8B-700TC How to Program Set (TRS, cassette) $74.95
8B-700TD How to Program Set (TRS, disk) $74.95
8B-700PC How to Program Set (Pet) $74.95
8B-700CD How to Program Set (C64) $74.95
8B-710AD Extra Student Workbook (Apple) $5.95
8B-710TC Extra Student Workbook (TRS) $5.95
8B-710PC Extra Student Workbook (Pet/C64) $5.95

PLATO COMPUTER LITERACY INTRODUCTION

This program from Control Data's PLATO software series lays the foundation for a computer literacy curriculum. It gives an introduction to the history, uses, and issues surrounding computers in today's society. Available for the Apple II and the Atari with 48K and disk, PLATO COMPUTER LITERACY has been thoroughly tested and proven in the academic community. Junior and senior high school level.

8L-4070 Computer Literacy (Apple) $60.00
8L-5070 Computer Literacy (Atari) $60.00



HOW TO BUILD A PROGRAM

This is one time when it is not impolite to look over someone's shoulder! The author of this book allows you to follow the progress of a programmer during the development of an entire project. He takes it from the original idea through the building of a relatively complex program all the way to the final polishing. The book includes a description of the errors and bugs that usually occur during a programming project. Watch an expert at work and see how it's done!

3B-068 How to Build a Program $19.95

Computer Programming and Literacy

LEARNING ABOUT COMPUTERS

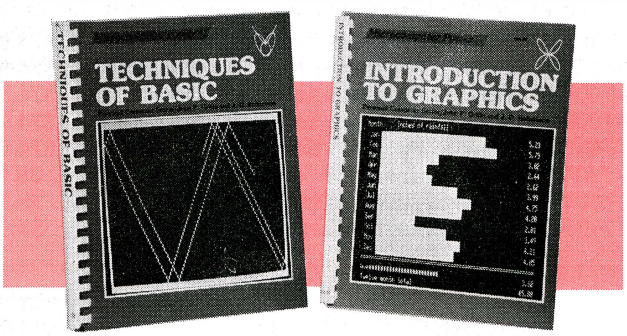
This factual series of 10 self-directing audio cassettes serves as preparation for understanding and working with computers. Fundamental questions are answered: What are computers? How are they used? What kinds of information can they process? Clear explanations and examples develop the concepts behind computer literacy and terminology. Students are guided step-by-step through the exercises by the narrator. Sections are included on computer languages, programming, flowcharts, and getting information into and out of computers. Set includes 10 audio cassettes, 300 response booklets (30 for each lesson), 10 reproducible post-tests, 10 lesson guides, and a comprehensive guide outlining the goals of the entire series.

HD-5884 Learning About Computers $129.95

INTRODUCTION TO GRAPHICS

Want to explore the power of graphics but need a resource for ideas and ways to implement those ideas? Then this book is for you! It includes 38 programs that instruct and demonstrate the techniques of effective graphics programming on the TRS-80. It progresses from simple PRINT statement graphics to table-driven programs using special graphics characters or pixel graphics. Bound in a flexi-spiral binding for easy desk-top reading.

9A-100 Introduction to Graphics $15.95



TECHNIQUES OF BASIC

This book is an invaluable addition to the library of any TRS-80 BASIC programmer. It takes you step-by-step through 61 programs that cover a wide variety of topics designed to demonstrate BASIC programming techniques as well as provide a basis for practical applications. Programs cover business, education, scientific, and home applications. Included are discussions of text processing, line renumbering, message managing, error trapping, and more. A truly outstanding reference work, bound in a flexi-spiral binding for easy desk-top reading.

9A-200 Techniques of BASIC $18.95

THE ELECTRONIC TOOL

A strikingly different computer literacy program! Through the use of clever graphics and schematics, the student is able to gain a mental picture of how a computer operates and processes data. The student learns how to store data, select and retrieve records, reorganize records in files, perform calculations, and more, by observing a graphically simulated computer on the screen. Students actually build their own files and then manipulate them, taking "hands-on" instruction one step further. The material is presented in a non-technical manner, and is suitable for grades 7 and up. Available for the Apple II with 32K and disk.

6M-3281 The Electronic Tool $34.95

COMPUTER LITERACY FILMSTRIPS

This series of five filmstrips with cassettes has been designed to assist the new computer user or student in understanding the terminology, operating features, and functions of computers. Visualization of information assists the viewer in understanding the relationships between computers, their operators and the tasks performed. The filmstrip titles are *Beginning Terminology, Advanced Terminology, BASIC Programming Language, Disk Operating Systems,* and *Computer Graphics.* An excellent series, suitable for any introductory computing course.

7R-6399 Computer Literacy Filmstrips $200.00

COMPUTER OPERATIONS FILMSTRIP SERIES

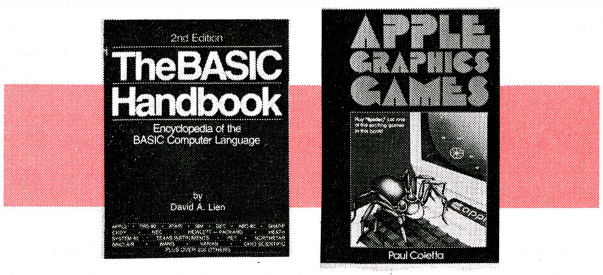
This series of filmstrips is designed to introduce the new user, student, or beginning instructor to the basic operational features of specific computers. Each presentation outlines the step by step start-up procedures for bringing the computer to full operation. Keyboard layouts, input/output connections, and disk and cassette loading operations are just a few of the topics covered. Beginning BASIC commands are also introduced. This series is an excellent resource for introductory courses in microcomputing or for in-service teacher training.

7R-6300 TRS-80 Model III Operations $40.00
7R-6301 Atari 800 Operations $40.00
7R-6302 Apple II+ Operations $40.00
7R-6309 Apple IIe Operations ..... *New* $40.00
7R-6303 Commodore Pet/CBM Operations $40.00
7R-6310 Commodore 64 Operations ..... *New* $40.00
7R-6311 IBM PC Operations ..... *New* $40.00

APPLE GRAPHICS GAMES

Discover the excitement of creating arcade games on the Apple II computer with this combination book-and-disk package. All of the games on the disk are fully documented and explained in the text; thus, you can learn exactly how they were created and how to replicate their techniques in your own programs. A shape-table utility program is included to help you with designing your own games. The book can also be purchased separately. Available for the Apple II with 48K and disk.

8P-0326 Apple Graphics Games (disk & book) $30.00
8P-0325 Apple Graphics Games (book only) $15.00



THE BASIC HANDBOOK

This encyclopedia of the BASIC language defines and explains nearly 500 BASIC commands for all popular makes of computers, including Apple, TRS-80, Pet, and Atari. It includes a section on converting programs from one computer dialect to another, as well as a comprehensive cross-referenced indexing system. A must-have reference source for the programming teacher. 480 pages. "...the standard reference work for the BASIC langauge."—*INFOWORLD.*

2K-300 The BASIC Handbook $19.95

INTRODUCTION TO PASCAL NEW

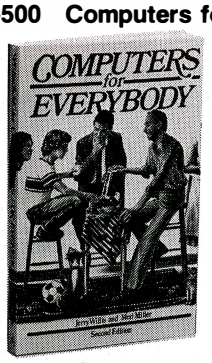
Here is an excellent introductory text to standard PASCAL programming. The approach differs from most books in that it incorporates a large number of complete programs and their documentation, sample runs, and illustrations. Forty-four fully documented programs are included. This paperback book is intended for secondary level students and up.

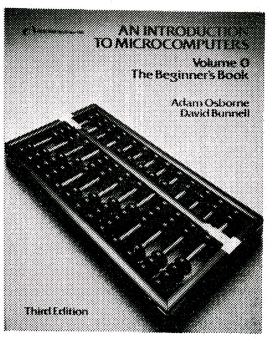
LP-8343 Introduction to PASCAL $7.95

COMPUTERS FOR EVERYBODY

This delightful book explains how a computer can be used by non-computer people. The material covers all of the things a beginner should know without using technical language that might confuse a novice. A wide spectrum of topics are covered, including current computer models. An excellent book for the first-timer. 186 pages. "Here at last is a clear, concise and comprehensive introduction to microcomputers." — *ELECTRONIC CLASSROOM.*

3B-500 Computers for Everybody $7.95





INTRODUCTION TO MICROCOMPUTERS

These two books are designed for those who know nothing about microcomputers but wish to learn. With the help of numerous illustrations and a wonderfully light-hearted text, BEGINNER'S BOOK will help give a sound understanding of the fundamentals of microcomputing. BASIC CONCEPTS develops a detailed picture of what a microcomputer can do, how it does what it does, and how the capabilities of micros can best be applied. Using concepts common to all microprocessor systems, this comprehensive volume will provide a firm foundation for understanding and demystifying the computer.

6P-268 Beginner's Book $14.95
6P-349 Basic Concepts $16.95

VOICE BOX

This amazing unit allows you to add high-quality speech to your programs! Working with the 64 basic phonemes of human speech, the menu-driven software provides the framework for constructing complete words and phrases that can be "played" audibly through the VOICE BOX firmware and incorporated into your own programs. You can add tutorial "help" messages, additional instructions, or audible reinforcement; incorporate sound effects, such as roaring lions or alien voices; provide a means of communication for the blind; in short, anything that your imagination can devise for a talking computer! An animated face with full lip-sync can even be used to show off your speaking machine! The Apple version utilizes an expansion slot card and the Atari version a small box that plugs into the serial port; both versions require 32K and disk. Make your programs come alive with the VOICE BOX!

4A-3001 Voice Box (Apple) $215.00
4A-5003 Voice Box (Atari) $169.00

INTRODUCTION TO THE MICROCOMPUTER KEYBOARD

How to use the microcomputer keyboard is the topic of this multi-media kit that is equally useful for the novice typist and the more experienced touch-typist who needs to become familiar with the computer keyboard. After completing this program, students will be prepared to concentrate on computer functions and lessons without being hampered by a lack of keyboard understanding. Includes one disk and one audio cassette; available for the Apple II with 48K (not compatible with the Apple IIe).

EB-127A Introduction to Microcomputer Keyboard .$70.00

INTRODUCTION TO COMPUTER LANGUAGE

This set utilizes a combination of filmstrip, audio cassette, software, and print media to provide a general introduction to computer languages and the basic principals of programming. Each lesson will acquaint the student with how the computer carries out arithmetic operations and manipulates variables, how to prepare a program, how to generate simple graphics, and more; all in the form of exercises performed on the computer with direction from the accompanying audio cassettes. Additional reinforcement is provided through the workbook exercises. A detailed teacher's manual provides the full text of the tape presentations, summaries of each computer lesson, guidelines for monitoring student progress, and answers to the exercises. Two diskettes, 10 audio cassettes, a filmstrip, and a workbook are included; available for the Apple II with 48K and disk. (This set incorporates portions of the STEP BY STEP program, 7B-110AD, listed on page one of this catalog.)

EB-127B Introduction to Computer Language $230.00

SIMULATED COMPUTER

This program graphically simulates the internal operation of a small computer. Students can input and run programs, seeing the results of each operation and how it is logically interpreted inside the computer, right on the screen. The program displays messages describing what it is about to do, and provides descriptive error messages. A five-lesson tutorial and reproducible manual are included. Available on 32K disk for the Apple II; and on 16K cassette for the TRS-80 and Atari. "...a great introduction to the concept of a microprocessor." — *CREATIVE COMPUTING.*

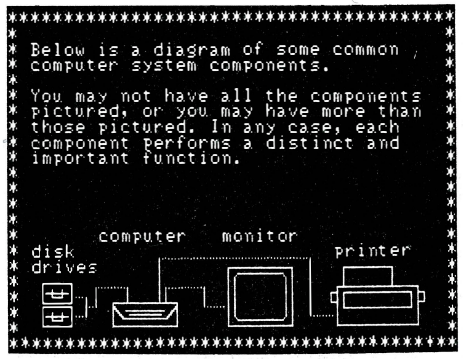
3M-A04 Simulated Computer (Apple) $29.95
3M-T04 Simulated Computer (TRS-80) $29.95
3M-R04 Simulated Computer (Atari) $29.95

HANDS-ON BASIC PROGRAMMING

With this package students learn to program through discovering how the computer thinks! HANDS-ON BASIC PROGRAMMING teams a comprehensive workbook with an interactive tutorial disk to teach BASIC. The software eliminates the scratch-sheet figuring inherent in traditional methods of learning to program. Its tracing screens and special displays let the student watch as the computer executes a program that they have written; the interactive commands and easy-to-use error-trapping tools let them examine and diagnose problems right on the screen. The 200-page text is written on an easy level in plain English, and it steps gently through each phase of the programming process. Available for the Apple II with 48K and disk.

3L-EW61AD Hands-On BASIC Programming $79.00

Computer Programming and Literacy


Below is a diagram of some common computer system components.
You may not have all the components pictured, or you may have more than those pictured. In any case, each component performs a distinct and important function.
disk drives
computer
monitor
printer

COMPUTER LITERACY INTRODUCTION SERIES

This series of five programs introduces the basics of computer literacy. Each unit is written in a light and humorous manner with extensive use of graphics, making them ideal for use as first-time materials for the novice. Included are *Introduction to the Computer*, *The Computer as a Calculator*, *The Printer* (an Epson MX100 or MX80 with Graftrax is required), *Computer Graphics*, and *Computer Simulation*. All units are for the Apple II with 48K and disk; their running times vary between 25 and 40 minutes. An excellent introductory series for the novice computer user!

4M-100 Introduction to the Computer $46.45
4M-200 The Computer as a Calculator $31.45
4M-300 The Printer $38.45
4M-400 Computer Graphics $46.45
4M-800 Computer Simulation $38.45
4M-950 Computer Literacy Introduction Series ... $195.00

VISIBLE PASCAL NEW

This user-friendly, interactive tutor teaches PASCAL programming. Students can start writing simple PASCAL programs—including graphics and animation, games, and practical application programs—in less time than it takes to get started in BASIC. A "Visible Execution" feature shows each line of the program as it is performed, making the language easier to learn and simplifying the task of finding errors. Immediate feedback is provided throughout the lessons, and extraneous keys are disabled in early lessons to prevent inadvertent keying mistakes. A PASCAL language card is not required, as the program contains a built-in PASCAL interpreter that allows you to program directly in PASCAL. This set is particularly useful in preparing for the ETS Advanced Placement Test in Computer Science, which requires a knowledge of the PASCAL language. Includes two disks with documentation for the Apple II with 48K.

4N-888206 Visible PASCAL $95.00

BASIC PROGRAMMING DUPLICATING BOOKS

These two duplicating books provide well-organized, step-by-step instruction on how to program in BASIC. *Book A* presents creative lessons and exercises on the main parts of a computer, the keyboard layout, editing techniques, variables, BASIC statements such as Print, Goto, New, Run, and List, and more. *Book B* is an introduction to more advanced programming using commands such as Input, If/Then, For/Next, Read/Data, Tab, and RND. Both books can be used as classroom or individual aids, and feature teacher's guides and answer keys.

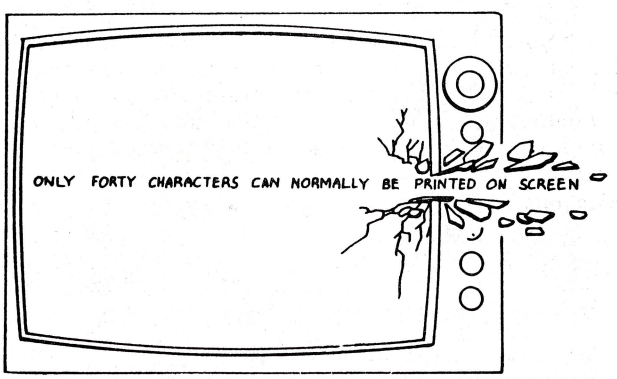
MC-871 BASIC Programming Book A $5.95
MC-873 BASIC Programming Book B $5.95

DEBUGGER PRO SERIES

64

This series of six tapes for the programming student presents short one- or two-screen programs containing 10 errors for the student to debug. Each tape covers a useful programming concept; the student must study and develop a working understanding of the concept in order to successfully debug the program. Tape 1, *Random Rectangles*, covers programmed cursor movements, simple looping, and variable usage; Tape 2, *Digital Clock*, deals with looping and changing of variables; Tape 3, *Message Sender*, works with timing loops and cycles, and simple scrolls; Tape 4, *Helicopter*, presents graphics movements using subroutines; Tape 5, *Phone List*, covers arrays, sorting, and data printing; and Tape 6, *Puzzle*, deals with simple interactive programming. Debugging tips, program outlines, and teacher instructions are included. Designed for the Pet with 8K and cassette, and the Commodore 64 with 64K and disk.

6G-16EP Debugger Pro Series (Pet) $71.70
6G-16EC Debugger Pro Series (C64) $89.70



THE ELEMENTARY APPLE THE ELEMENTARY COMMODORE

64

These books are intended to help students learn how to operate and program Apple II or Commodore 64 computers. Designed for the beginner, they contain many lighthearted illustrations to make learning computer literacy enjoyable as well as informative. The range of topics goes from hooking up the equipment to working with PEEKS and POKES, and everything in-between. Information on User Groups, available application software, and sample programs are included. 210 pages.

3A-10 The Elementary Apple $14.95
3A-34 The Elementary Commodore $14.95

MICRO SPIRIT MASTERS

These three worksheet books, each containing 50 spirit masters, will help your students learn the ins and outs of microcomputers. MICRO 1, *Introduction to Computer Use*, describes the computer, the keyboard, flowcharting, and reading and writing simple programs. MICRO 2, *Begin With BASIC*, covers how to modify programs, how to solve problems, and writing more complex programs using IF/THEN; and MICRO 3, *Progress with BASIC*, demonstrates program analysis, how to make corrections, and writing advanced programs using nested FOR/NEXT loops. The books are available individually or as a set. Grade level is 6 to 12.

WW-35556 Micro 1 Spirit Masters $18.95
WW-35557 Micro 2 Spirit Masters $18.95
WW-35558 Micro 3 Spirit Masters $18.95
WW-95560 Micro Spirit Master Set (3 books) $51.00

BASIC TUTOR SERIES

This nine-disk series will provide a comprehensive introduction into BASIC programming. More than 80 programs provide sequential study and practice of programming skills and techniques. Disk 1 describes system commands, keyboard operation, and available Apple features; Disk 2 provides an introduction to programming commands; Disk 3 covers graphics programming commands; Disk 4 covers the creation of music and sounds; Disk 5 deals with reading and writing text files; Disk 6 involves picture and graphic shape creation; Disk 7 covers algorithms; Disk 8 moves on to advanced topics such as POKES, PEEKS, and CALLS; and Disk 9 contains utilities and sub-routines that can be incorporated into practice programs. Each disk is fully menu-driven, and is designed for the Apple II with 48K. If you are looking for comprehensive tutorial and practice material on BASIC programming, then the BASIC TUTOR SERIES is for you!

3N-100AD BASIC Tutor Series $280.00

COMPUTER CONCEPTS FILMSTRIP SERIES

A series of three filmstrips with cassettes that introduce the computer and its history, function, and applicability in today's society. The filmstrip titles are *Introduction To Computers*, *Peripherals and Programming*, and *Personal Computers*. This series is an excellent introduction for all high school level students.

7R-6100S Computer Concepts Series $108.00

BASIC REFERENCE CARDS

These useful cards can be kept close at hand by the computer for quick and easy reference. No need for a roomful of students to fumble with a bulky manual to look up one- or two-word commands; these heavy-duty 8½" x 3¾" cards are simple to work with and can be situated conveniently at each computer station. Available individually or in sets of 10 cards.

6X-10 Apple II BASIC Card $3.95
6X-18 Apple II BASIC Card Set $37.50
6X-20 TRS-80 Model III BASIC Card $3.95
6X-28 TRS-80 Model III BASIC Card Set $37.50

BASIC PROGRAMMER'S NOTEBOOK

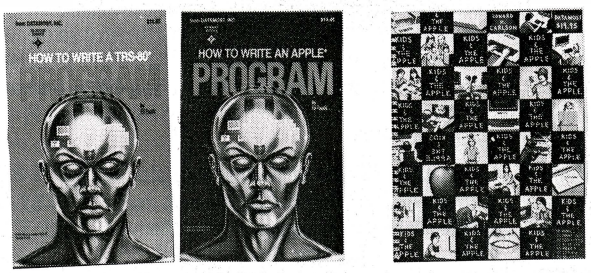
Many shortcut BASIC subroutines and programming techniques to replace more lengthy and memory-intensive methods are contained in this valuable book. Instructional, game, and record keeping programs are included, with debugged sample routines that are easily modified for specific use. If you're ready to step beyond "just getting it to run," then this volume should be in your library. 112 pages.

2B-21841 BASIC Programmer's Notebook $14.95

HOW TO WRITE A PROGRAM

This book, available in Apple, TRS-80, and IBM PC versions, are "how-to" tutorials on writing programs for specific computers. Filled with lively illustrations, the books cover all of the steps necessary to produce an original program, from initial concept to completed, error-free code. Suitable for junior high school level and up, the books can be used either for self-instruction or as a classroom text. 140 pages.

3A-27 How to Write an Apple Program $14.95
3A-33 How to Write a TRS-80 Program $14.95
3A-28 How to Write an IBM Program $14.95



KIDS AND THE APPLE
KIDS AND THE ATARI

Here are two books designed for young people who want to learn about computers and programming on the Apple II or Atari. These large 8½" × 11" spiral-bound volumes are ideal for school use, containing 35 chapters covering beginning programming techniques, graphics, and advanced topics. Students learn how to write programs by creating games and solving various problems. The book can be used as a self-study guide or as a classroom text; grade level is 7 and up. 218 pages.

3A-19 Kids and the Apple $19.95
3A-55 Kids and the Atari $19.95

LEARNING TRS-80 BASIC
LEARNING IBM BASIC

Whether you own a TRS-80 or an IBM PC, this book is a must. Picking up where the manufacturer's manuals leave off, these excellent tutorials by the well known Dr. David Lien provide instruction in elementary and intermediate level programming techniques for your TRS-80 or IBM. Classroom-proven, the author anticipates questions and provides comprehensive explanations of the important ideas; the reader is never left wondering what to do next. "This is sure to become another classic for your library." — *INFOWORLD.*

2K-400 Learning TRS-80 BASIC $19.95
2K-500 Learning IBM BASIC $19.95

INVITATION TO PROGRAMMING

These three lesson programs are designed to teach the fundamentals of programming in Atari BASIC. PROGRAMMING 1 introduces the Atari keyboard, fundamental BASIC commands, and mathematical calculations; PROGRAMMING 2 covers flowcharting, the Read and Data statements, and Peek and Poke; PROGRAMMING 3 deals with sound, music, color, graphics, and more advanced programming commands. A recorded voice on each cassette asks the student questions on the material, and the computer then evaluates the answers and provides feedback. Available for the Atari with 16K and cassette. "...a well-presented, enjoyable set of lessons..."—*THE ADDISON WESLEY BOOK OF ATARI SOFTWARE.*

2D-CX4101 Invitation to Programming 1 ..... $25.95
2D-CX4106 Invitation to Programming 2 ..... $30.95
2D-CX4117 Invitation to Programming 3 ..... $30.95

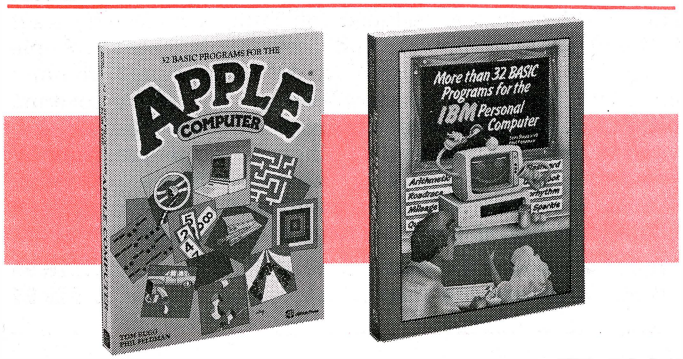
Computer Programming and Literacy

COMPUTER LITERACY: A HANDS-ON APPROACH

NEW

This ideal first course prepares students and teachers to use and understand computers in work and everyday life. Featuring 34 classroom and 33 hands-on lessons, it covers how to operate a microcomputer, writing simple BASIC programs, problem solving, organizing information, and real-world applications of computers. The series consists of a textbook with 67 units, including hands-on lab sections; a teacher's guide with quizzes, blackline masters, and course objectives; a student workbook with pencil and paper exercises for reinforcement and review; a workbook answer key; and a networkable computer disk, containing programs which serve as models for the material in the hands-on sections. The texts and workbooks can also be purchased individually. Available on 32K disk for the Apple II and TRS-80.

5Y-200AD Computer Literacy Series: Apple $49.95
5Y-205AD Extra Student Text: Apple $17.97
5Y-210AD Extra Student Workbook: Apple $5.00
5Y-200TD Computer Literacy Series: TRS-80 ..... $49.95
5Y-205TD Extra Student Text: TRS-80 ..... $17.97
5Y-210TD Extra Student Workbook: TRS-80 ..... $5.00



32 BASIC PROGRAMS

Available in both disk and book format, 32 BASIC PROGRAMS is chock full of programs suitable for demonstration and discussion in BASIC programming classes. Each program features a complete bug-free listing in the book with implementation notes and background information; the disk contains all of the programs in the book in a load 'n go fashion to save typing time. An excellent resource for novices and new programmers. Available on disk or in book format for the Apple II and TRS-80 with 32K; the Pet with 8K; and the IBM PC and the Commodore 64 with 64K.

3B-700 32 BASIC Programs Book (Apple) $19.95
3B-705 32 BASIC Programs Disk (Apple) $39.95
3B-710 32 BASIC Programs Book (TRS-80) $19.95
3B-715 32 BASIC Programs Disk (TRS-80) $39.95
3B-720 32 BASIC Programs Book (Pet) $19.95
3B-725 32 BASIC Programs Disk (Pet) $39.95
3B-730 32 BASIC Programs Book (C64) $19.95
3B-735 32 BASIC Programs Disk (C64) $39.95
3B-740 32 BASIC Programs Book (IBM) $19.95
3B-745 32 BASIC Programs Disk (IBM) $39.95

THE PET PERSONAL COMPUTER FOR BEGINNERS

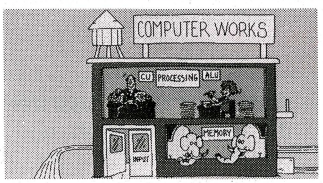
This handy guide is written for use with most models of the Pet computer, from the original 2001 to the 8032. Suited for novices with no prior computer experience, this sourcebook shows the reader how to make full use of the Pet computer's capabilities. Included are special suggestions on system start-up, maintenance, and classroom usage.

8P-8278 Pet Personal Computer for Beginners $16.95

BASIC APPLICATIONS

These books for the Apple, TRS-80, and Pet microcomputers contain a potpourri of programs ideally suited for student practice or demonstrations. Book 1 contains programs for a telephone dialer, a digital stop watch, a spelling test, a house buying guide, a gas mileage calculator, and more. Book 2 contains programs for a monthly savings plan, two dungeon programs on math and history, a dungeon game, stock market programs, plus many more general-purpose programs. Complete listings and sample runs are provided; all of the programs have been selected to represent common applications and specific techniques. Book 2 is not available for Pet.

2B-21789 BASIC Applications, Book 1 (Apple) $13.95
2B-21788 BASIC Applications, Book 1 (TRS-80) ... $12.95
2B-21790 BASIC Applications, Book 1 (Pet) $13.95
2B-21864 BASIC Applications, Book 2 (Apple) $12.95
2B-21865 BASIC Applications, Book 2 (TRS-80) ... $12.95



HOW THE COMPUTER WORKS

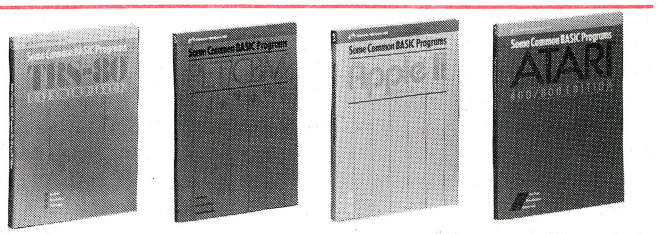
This filmstrip set provides a detailed picture of how computers work. It outlines the various components of a computer system, including memory storage and input/output devices; and demonstrates programming with a graphic illustration of how a program is executed inside a computer. The historical search for improved methods of computation and record keeping is also discussed. Includes three filmstrips, three audio cassettes, and a teacher's guide.

8K-478 How the Computer Works $139.00

PET GRAPHICS

This set of Pet machine-language subroutines instructs the Pet user on how to program graphic displays. The subroutines speed up time-consuming programs written in BASIC and enable the user to write more efficient programs.

4J-1051 Pet Grapics (book, 218 pages) $19.95



SOME COMMON BASIC PROGRAMS

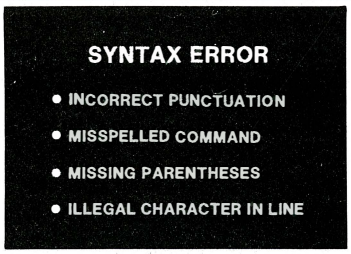
A collection of 76 program listings that cover common business and mathematical functions, providing a ready-made and easy-to-use library of applications. Included are programs on depreciation, investments, interest, vectors, equations, matrices, distributions, regressions, factors, deviations, and much more! A separate edition is available for each computer.

6P-403 Some Common BASIC Programs (Pet) $16.95
6P-535 Some Common BASIC Programs (Atari) ... $16.95
6P-543 Some Common BASIC Programs (TRS) ... $16.95
6P-683 Some Common BASIC Programs (Apple) .. $16.95
6P-802 Some Common BASIC Programs (IBM) $16.95

BASIC PROGRAMMING FOR THE APPLE II

This unit consists of a text on BASIC programming written by the original authors of the BASIC language, Professors Kemeny and Kurtz of Dartmouth College, and a correlated disk with solutions to the exercises in the book. The topics covered include *Elementary BASIC, Advanced BASIC, File Instructions, Matrix Operations,* and more. Designed for high school and college level students, the set includes an instructor's manual and a 15-page pamphlet of background information. The disk is designed for the Apple II with 48K and disk.

2V-C30 BASIC Programming For The Apple II $99.95



DEBUGGING

Students who write their own programs must learn to edit them successfully in order to become fully proficient with programming skills. This filmstrip/audio tape combination illustrates and explains some of the common errors that occur when writing a computer program in BASIC. As students understand and learn how to correct programming errors, they become capable of "debugging" their programs. Variations among the popular brands of microcomputers are noted.

3K-FSC372 Debugging $23.00

COMPUTER SOFTWARE & HARDWARE

These two filmstrip sets cover the essentials of computer literacy. COMPUTER SOFTWARE explains how software enables a computer to process information; it describes how certain types of software guide the computer's internal operations, while others bridge the language gap between humans and computers. COMPUTER HARDWARE tackles the complex question of how a computer works. Each step in a computer's operation is examined in detail, from input, through information storage and processing, to output. Included are descriptions of typical microcomputers, as well as common sensing devices used at supermarkets, banks, and utility companies. Each set contains four filmstrips, four audio cassettes, and a teacher's guide.

GU-0430 Computer Software $169.50
GU-0429 Computer Hardware $169.50
GU-1912 Computer Literacy Package (2 sets above) $305.10

THE TRS-80 MODEL III USER'S GUIDE

Packed with examples and illustrations, this handy sourcebook gives you all the information you need in order to take full advantage of the hardware and software for the TRS-80 Model III. In non-computerese English, you will learn about the Model III's disk operating system, printers, Model I to Model III conversions, cassette to disk conversions, and more. Descriptions of popular programs and how to evaluate their effectiveness are also featured. Learn it all, from "booting up" to printing reports.

4N-27699 TRS-80 Model III User's Guide $14.95

COMPUTER FILMSTRIP SERIES

These three audio-visual sets will provide a complete introduction to the world of computers. Set 1 is entitled AN INTRODUCTION TO COMPUTERS, and contains five filmstrips with audio cassettes: *The History of Computing Devices*; *The Many Uses and Needs for Computers, Parts 1 and 2*; *Computers Today*; and *Computers and the World of the Future*. Set 2 is entitled INTRODUCTION TO COMPUTER PROGRAMMING, and contains six filmstrips with audio cassettes: *The History of Digital Computers*; *Uses of Digital Computers*; *Parts and Functions of Digital Computers*; *Flow Diagramming Introduction*; and *Introduction to Programming, Parts 1 and 2*. Set 3 is entitled BINARY NUMBER SYSTEM and contains four filmstrips with audio cassettes: *Binary Numbers, Parts 1 and 2*; and *Binary Numbers at Work, Parts 1 and 2*. Each set may stand alone or be used in conjunction with the other sets. Grade level is 6 to 9.

RH-200301 Set 1: Introduction to Computers $95.00
RH-200311 Set 2: Introduction to Computer Programming $130.00
RH-200321 Set 3: Binary Number System $90.00

APPLE II USER'S GUIDE

The key to unlocking the full power of your Apple II+ or Apple IIe computer! This book brings together in one place a wealth of information for Apple computer users. The topics include Applesoft and Integer BASIC programming; a thorough description of all BASIC statements, commands, and functions; high-resolution graphics; color; sound; machine-level programming; and other advanced applications. "If I could have only one manual beside my Apple, it would be the Apple II User's Guide."—*ASSOC. FOR EDUCATIONAL DATA SYSTEMS.* 385 pages.

6P-462 Apple II User's Guide $17.95

PROGRAMS FOR BEGINNERS ON THE TRS-80

A book of practical and interesting programs that can be used immediately by beginners. Learn step-by-step how 21 sample programs work. Techniques are described line-by-line within the programs, and a special index enables one to locate other programs in the book utilizing the same BASIC commands and statements. An ideal text for the novice. 150 pages.

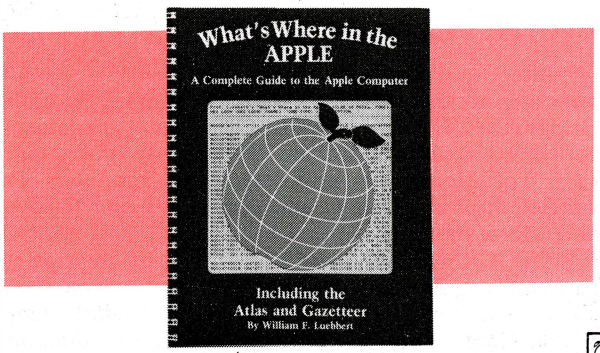
4J-5182 Programs for Beginners $10.95

STIMULATING SIMULATIONS

Here is an exciting handbook containing twelve simulation-game programs designed to show, step-by-step, the various features of simulations and how they can be used. By working with actual programs, the student can see how the techniques are applied and then assembled into larger and more complex programs. Each listing includes a flowchart, sample run, and documentation that includes variations on the techniques. Available in two versions, one for general BASIC and one for the Atari.

4J-5170 Stimulating Simulations (BASIC) $7.50
4J-5197 Stimulating Simulations (Atari) $7.50

Advanced Programming



WHAT'S WHERE IN THE APPLE

Basic and assembly language programmers will delight in this book which locates and describes over 2000 memory locations of PEEKs, POKEs, and CALLs in the Apple computer. You can speed up and streamline your programs, and simplify coding and interfacing. The locations of various monitor, DOS, Integer, and Applesoft routines are listed here, along with information on their functions. WHAT'S WHERE IN THE APPLE contains 128 wire bound pages, an introduction, and a user's guide. If you're serious about programming on the Apple, then this book is for you!

6W-100 What's Where In the Apple $24.95

ALPHA PLOT

A package of graphics/text utility programs that let you create high-resolution color drawings and charts, and type in upper and lower case with proportional spacing, all with no additional hardware. Images on both hi-res pages can be manipulated with ease: move sections, switch pages, superimpose, and reverse can be accomplished with simple keystrokes. A special plotting mode lets you see where your line is going before you plot it. Text can be in any of four sizes, in color, even sideways if you want. Many other useful programs for manipulating the hi-res pages are included. Available for the Apple II with 48K and disk.

2H-950 Alpha Plot $39.50

DOS BOSS

A versatile utility that allows you to customize your Apple DOS system commands to your requirements. Change the CATALOG command to MENU or M to save keystrokes, or have an automatic menu or listing of disk contents upon booting up. Rename error messages so that they are more descriptive (very useful for those unfamiliar with the computer). This program gives you complete flexibility in rearranging any DOS commands to suit your needs. Available for the Apple II with 48K and disk. "Both beginners and experimenters will find this program useful." — *APPLE COMPUTER SOFTWARE 1983.*

2H-800 DOS Boss $24.00

UTILITY CITY

Twenty-one utility programs for the Apple: *Key-Cat*, which allows you to run any program from the catalog with one keystroke; *Xlister*, which provides a reformatted listing that prints your program with clear, easy-to-read indentations, placing multiple line statements on separate lines, and utilizing multiple indentations to delineate for-next loops; *Connect*, which appends your Applesoft programs together or attaches sub-routines; *Run Counter*, which counts the number of times a program has been run; and many more useful programs. A must for all programmers! Available for the Apple II with 48K and disk.

2H-850 Utility City $29.50

PROGRAM YOUR OWN GRAPHICS!

Add variety to your curriculum with computer-generated graphics that you can program yourself! Create charts, shapes, musical notations, maps, or animated drawings of people, animals, and machines. The disk contains 12 shape tables that allow you to select and store hundreds of figures. Mix or match them, or integrate them into your own BASIC programs. An extensive teacher's guide is included. Designed for the Apple II with 32K and disk.

8K-773AD Program Your Own Graphics! $39.00

APPLE MACHINE LANGUAGE

A machine language programming book that's fun and entertaining. This all-new approach helps the user go from being a mere Applesoft programmer to a direct machine language programming expert. Complete with sections on color, graphics, and sound, this step-by-step demonstration of Apple programming features includes countless illustrations, self-check exercises, and all of the essential material needed to start programming the Apple System Monitor.

8P-2307 Apple Machine Language $14.95

HI-RES SECRETS

HI-RES SECRETS is a learner-oriented graphics program that provides detailed instruction in assembly and machine-language graphics. Includes comprehensive information on creating, examining, editing, and animating vector shapes, block-shapes, text-file shapes, and more. Two page flipping animation, opcodes, music and sound-effect generation, and font usage are just a few of the many topics covered in depth. This excellent tutorial and application package can provide the mechanics and techniques for creating professional-looking high-resolution graphics for anyone with a basic knowledge of programming. Available for the Apple II with 48K and disk. "...it's the most complete compilation of Apple graphics information on the market." — *SOFTSIDE.*

2C-2440 Hi-Res Secrets $129.95

TRICKY TUTORIALS

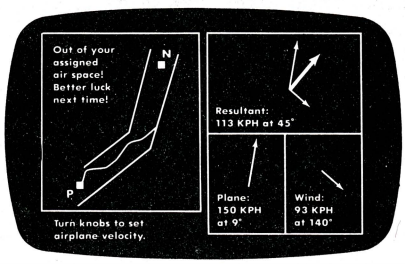
This set provides a complete tutorial on the unique programming capabilities of the Atari computer. *Display List* teaches how to mix large and small text and high and low resolution graphics on the same screen; *Scrolling* covers how to move text and graphics up, down, sideways, and diagonally; *Page Flipping* shows how to draw on one screen page and then flip to another so that each screen appears instantly; *Basics of Animation* introduces the fundamentals of animating simple shapes; *Player/Missile Graphics* provides an easy-to-understand explanation and an excellent utility on this complex topic; and *Sound and Music* provides complete instruction on how to liven up your silent programs; it also includes a player piano routine! Available for the Atari with 32K and disk; truly an indispensable series for any programmer who wants to fully exploit the many capabilities of the Atari computer.

3W-100RD Tricky Tutorials Series $119.95

SEMANTIC CALCULATOR

Are your students adding 6 apples and 6 oranges and getting 12? Stop. Help is on the way! The SEMANTIC CALCULATOR is an innovative tool that helps your students explore and solve word problems. By focusing on units rather than numbers, the program helps students understand how to deal with real-world math problems. When a solution is attempted using incorrect units, the program will direct the student to the correct units needed in order to find the right answer. The step-by-step approach allows for discovery learning of problem-solving methods. A tutorial mode helps students to get started. Available on disk for the Apple II and the Atari with 48K and the TRS-80 with 32K; includes a teacher's guide and a back-up disk. Grade level is 6 to 10. "...a welcome addition to the growing list of quality software for the classroom."—*CLASSROOM COMPUTER LEARNING.*

8K-1081AD Semantic Calculator (Apple) $95.00
8K-1082TD Semantic Calculator (TRS-80) $95.00
8K-1091RD Semantic Calculator (Atari) $95.00


Out of your assigned air space! Better luck next time!
N
P
Resultant: 113 KPH at 45°
Plane: 150 KPH at 9°
Wind: 93 KPH at 140°
Turn knobs to set airplane velocity.

FLIGHT VECTOR

A complete package, consisting of tutorial and game, designed to teach students about vectors and their composition. Reading is minimized, while actual manipulation and experimentation with the graphic vectors is encouraged. The program is supplemented by a flight test, in which the student will utilize the vector knowledge gained in controlling the altitude and direction of an airplane. Features high resolution color graphics; available for the Apple II with 48K and disk.

3M-A06 Flight Vector $29.95

INTRODUCTION TO MATHEMATICS ON THE COMPUTER

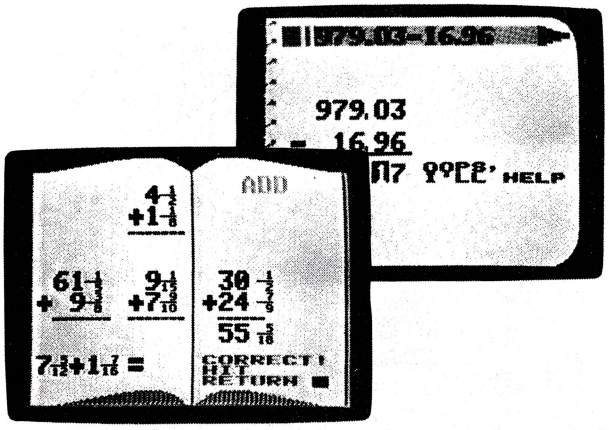
This program was designed to help slow learners and learning disabled students build their mathematical abilities by decreasing distractibility factors and increasing interest. It covers addition, subtraction, multiplication, and division with each area featuring six levels of difficulty and twenty randomly selected problems. Available for the Apple II with 48K and disk, the TRS-80 with 16K and cassette, and the Pet with 8K and cassette.

3K-CP20030P Introduction to Math (Pet) $39.95
3K-CP20030T Introduction to Math (TRS-80) $39.95
3K-DK20030A Introduction to Math (Apple) $49.95

INTRODUCTION TO DECIMALS ON THE COMPUTER

This program is similar in format to INTRODUCTION TO MATHEMATICS ON THE COMPUTER; it covers the addition, subtraction, multiplication, and division of decimals. Each topic features six levels of difficulty. Available for the Apple II with 48K and disk, the TRS-80 with 16K and cassette, and the Pet with 8K and cassette.

3K-CP20031P Introduction to Decimals (Pet) $39.95
3K-CP20031T Introduction to Decimals (TRS-80) $39.95
3K-DK20031A Introduction to Decimals (Apple) ... $49.95



MATHEMATICAL CONCEPTS

Easy-to-use and comprehensive in their coverage, these excellent programs provide students with the best that computer education has to offer. Each program features three instructional modes, including: Readiness Mode, which provides speed drills to help students master basic concepts, with the number of problems and time limit selectable by either the student or the instructor; Practice Mode, which tests the student on practice problems and branches to a review segment after incorrect answers to demonstrate step-by-step solutions; and Instruction Mode, which gives extra help to students who haven't mastered all of the steps in a computational skill. A complete management system holding up to 120 student records is provided, along with optional automatic advancement of students to the next skill level. Student records can be viewed at any time. Unique and informative graphics highlight the material. The units contain reproducible activity sheets keyed to each skill and a teacher's guide. All programs are for the Apple II with 48K and disk; grade level is 6 to 8. "A fine addition to any intermediate-grade math curriculum." — *COURSEWARE REPORT CARD.*

6T-7883 Division Skills $49.95
Includes 90 basic facts on one-and two-digit divisors, whole number remainders, and fractional and decimal remainders.

6T-7877 Mixed Numbers $49.95
Includes readiness skills, addition, subtraction, multiplication, and division of mixed numbers.

6T-7878 Decimal Skills $49.95
Includes readiness skills, addition, subtraction, multiplication, and division of decimals.

6T-7891 Percents $49.95
Includes solving for percentage, base, and rate; expressing and solving equations; and solving for percent increase or decrease.

6T-7890 Ratios and Proportions $49.95
Includes readiness skills, writing and solving proportions, and writing and solving ratios.

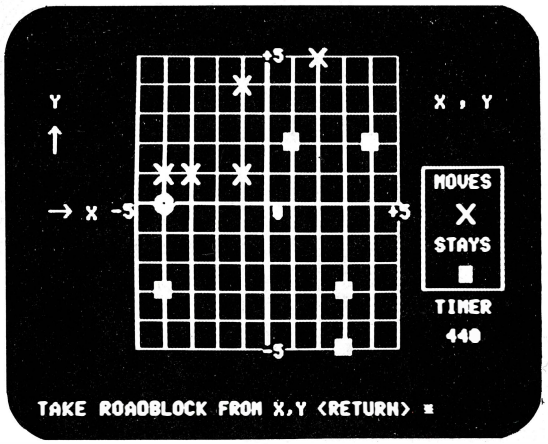
6T-7820 Mathematical Concepts Series (set of five above) $239.95

FRACTIONS

This program contains a pre-test and six learning units on fractions, including definitions, common and lowest denominators, addition, subtraction, multiplication, and division. Each unit includes the use of both common fractions and mixed numbers. Features correct response reinforcement with immediate feedback. Available on 48K disk for the Apple II and the Atari, and on 32K cassette for the Atari.

3L-M20AD Fractions (Apple) $49.00
3L-M20RC Fractions (Atari, cassette) $29.95
3L-M20RD Fractions (Atari, disk) $39.95

Math



BUMBLE PLOT

BUMBLE PLOT is a set of five programs that builds graphing skills using positive and negative numbers to name points in four quadrant grids. With these programs, the student can expand skills in visualizing graph relationships, and will better understand such everyday applications as locating places on a map or interpreting charts. BUMBLE PLOT also features instructive color graphics and selectable sound and music options. Developed in conjunction with math specialists, this set of programs is highly recommended by our staff. Available for the Apple II with 48K and disk; age level is 8 to 13. "BUMBLE...is both educationally sound and fun to use."—*COMPUTE.*

8L-20AD Bumble Plot $39.95

LOGIC AND EUCLIDEAN GEOMETRY

This program teaches geometric structure using nine basic proof patterns, congruency, and equiangularity. Exercises are presented in angle and picture/symbol logic; topics in Euclidean geometry are presented in an interesting and easy-to-understand format. Available for the Apple II with 48K and disk.

2C-2270 Logic & Euclidean Geometry $29.95

STATISTICS

This program illustrates in a non-technical and easy to understand manner how the computer can be used to perform statistical calculations, including permutations, combinations, probability, mean-median-mode, regressions, and more. STATISTICS is designed for the Apple II with 48K and disk and is an excellent introduction to this complex topic.

4M-900 Statistics $30.50

GRAPHS, MEAN, MEDIAN, AND MODE

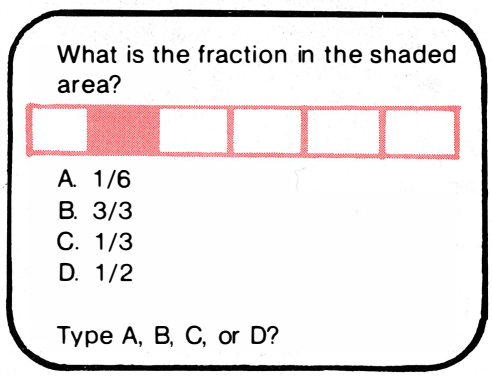
This program covers the topics of mean, median, and mode and how they relate to graphs. Full use is made of the computer's graphics capabilities, making the program enjoyable as well as educational. The student or teacher can choose from a wide range of examples and levels of difficulty. Available on disk (back-up included) for the Apple II with 32K, and on cassette for the TRS-80 with 16K and the Pet with 8K. "It is designed with the student in mind, and it can faithfully augment the work of a mathematics teacher." —*INFOWORLD.*

3K-CP20047P Graphs, Mean, Median (Pet) $19.95
3K-CP20047T Graphs, Mean, Median (TRS-80) ... $19.95
3K-DK2004647 Graphs, Mean, Median (Apple) $49.95

JUNIOR HIGH SCHOOL MATH SERIES

This is a complete set of drill and practice math programs designed for junior high school students. The computer generates a unique set of problems for each student; answers can be checked by the student with the computer or the computer can evaluate and score the student's results automatically. The correct solutions will be displayed for any questions that were missed, and the overall score indicated. The series topics include *Magic Squares, Modular Arithmetic, Proportion Problems, Multiplication, Division, Percent Problems, Fractions, Decimals, Bar Graph Analysis, Verbal Problems,* and *Mode, Median, and Mean.* Available on 32K disk for the Apple II and TRS-80; on 8K cassette and 16K disk for the Pet; and on 64K disk for the Commodore 64 and IBM PC.

6D-M3A Junior High Math (Apple) $200.00
6D-M3B Junior High Math (IBM) $200.00
6D-M3C Junior High Math (Pet, cassette) $200.00
6D-M3P Junior High Math (Pet, disk) $200.00
6D-M3R Junior High Math (C64) $200.00
6D-M3T Junior High Math (TRS-80) $200.00



FRACTIONS

This sequence of 24 interactive computer programs guides the student through the study of fractions. Each program presents a topic: one section explains the concept, the learner experiments with it, and solves problems; the next section extends the concept in a game or investigation activity. The series is carefully sequenced to provide understanding of each of the operations on fractions. Available for the Apple II and TRS-80 Models I and III with 32K and disk. "This is a remarkable set of programs." —*THE COMPUTING TEACHER.*

2A-1612A Fractions (Apple) $199.00
2A-1612T Fractions (TRS-80, Model I) $199.00
2A-1614T Fractions (TRS-80, Model III) $199.00

PYTHAGORAS AND THE DRAGON

A stimulating mathematics game in a fantasy game format. PYTHAGORAS AND THE DRAGON introduces Pythagoras as a mentor to the player; when called upon for aid, he will pose math questions for the student to solve, and depending on the speed and accuracy of the student's response, will confer secret information. This information will help the student in overthrowing the Master of Evil. The level of difficulty is selectable, with problems from arithmetic through plane geometry. A wonderfully motivating learning experience! Available for the Apple II with 48K and disk.

5H-770AD Pythagoras and the Dragon $45.95

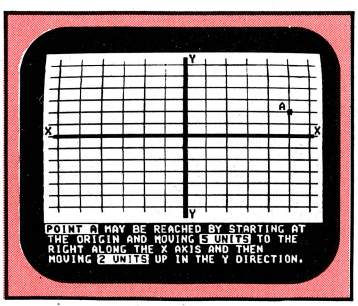
MATHEMATICS TUTORCOURSE SERIES

Included in this comprehensive series are four complete courseware systems covering mathematics instruction for grades 7 and up. Each TUTORCOURSE is a complete stand-alone package, featuring primary instruction with multiple choice questions, remedial branching to subprograms, criterion referenced computer-managed tests, and a complete management system for keeping track of student performance. This sophisticated system can interpret when a student needs only simple remediation, requires more extensive review, or when the student's knowledge is already beyond that of the material being presented, and branch to the appropriate section of the lesson. Complete individualization of instruction is thus provided for both the slow learner and the faster student; such a system of advanced branching is unique to the TUTORCOURSE series of programs. Printed diagnostic/prescriptive pre- and post-tests with user reproduction rights are included, as well as extensive documentation containing lesson outlines and course suggestions. Each complete TUTORCOURSE requires from nine to fifteen hours for completion of the entire set of lessons, except COMPLEX OPERATIONS which requires six to twelve hours. A complete sequence of instruction is thus provided for each topic, reinforcing and expanding upon the material presented by the classroom teacher. Requires an Apple II with 48K and one disk drive.

FRACTIONS

The FRACTIONS TUTORCOURSE consists of 15 disks that cover the fraction concept; numerator and denominator; parts of a unit or group; equal and unequal fractions; proper and improper fractions; prime and composite numbers and fractions; lowest common multiples; addition, subtraction, multiplication, and division of like and unlike fractions and mixed numbers; column method; cancellation; and division by inverting the divisor and multiplying. Also included are review and exercise programs.

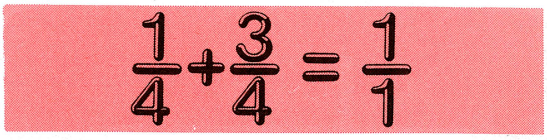
2P-25F Fractions Tutorcourse $765.00


Y
X
X
A
Y
POINT A MAY BE REACHED BY STARTING AT THE ORIGIN AND MOVING 5 UNITS TO THE RIGHT ALONG THE X AXIS AND THEN MOVING 2 UNITS UP IN THE Y DIRECTION.

GRAPHING

This set of two programs is designed to teach graphing concepts to junior and senior high school students. The first program introduces the coordinate plane, X and Y axes, origin, and ordered pairs; random points are displayed on the plane and the student inputs the correct X and Y coordinates for each. The second program gives further practice on plotting points on the plane, with the student marking the point on the screen which satisfies the ordered pair specified by the computer. Incorrect answers prompt an explanation of how to arrive at the correct solution. Available on disk for the Apple II with 48K and the TRS-80 with 32K (back-ups included); and on cassette for the Pet with 8K and the TRS-80 with 16K.

3K-130AD Graphing (Apple) $49.95
3K-130PC Graphing (Pet) $39.95
3K-130TC Graphing (TRS, cassette) $39.95
3K-130TD Graphing (TRS, disk)..... *New* $49.95



COMPLEX OPERATIONS

This TUTORCOURSE set contains 9 disks, covering averaging; rounding to the nearest ten and nearest hundred; estimating sums, differences, products, and quotients; prime numbers and factors; composite numbers and factors; greatest common factor; lowest common multiples; exponents and bases; perfect squares and square roots; order of operations; and practical applications.

2P-25E Complex Operations $459.00

DECIMALS

The TUTORCOURSE on DECIMALS contains 13 disks, covering whole numbers; base ten; place value; decimal fractions; changing common fractions and mixed numbers to decimals; decimal equivalents; denominators of 2, 4, 6, etc., and 5, 10, 25, etc.; addition, subtraction, multiplication, and division of decimals; rounding off; decimal point placement; and non-terminating decimals. A general review and final test are included.

2P-25G Decimals Tutorcourse $663.00

PERCENTAGES

The PERCENTAGES TUTORCOURSE contains 13 disks covering fractions and percents; percent as hundredths; changing fractions to percent and vice versa; bank interest; finding a percent of a number; the three types of percent problems: base, percent, and percentage; discount; selling price; sales tax; income tax; commissions; and net proceeds. A final test is included.

2P-25H Percentages Tutorcourse $663.00

IMAGINATIVE MATH

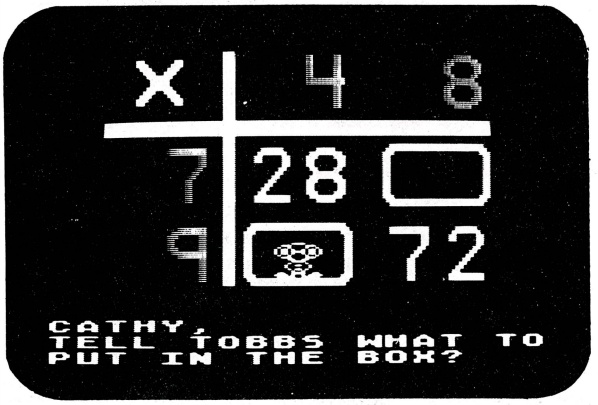
This set of programs developed by the Minnesota Educational Computer Consortium (MECC) is designed for intermediate mathematics instruction. Four programs, *Bagels, Snark, ICBM,* and *Radar,* teach students logic while reinforcing the concepts of plotting points or angle measurements. *Algebra* provides drill and practice in solving equations; *Slope* deals with linear functions; *Polygraph* plots equations on a rectangular coordinate system; and *Polar* graphs functions on polar coordinates. An excellent series written by experienced teachers. Available for the Apple with 32K and disk; a back-up disk is included.

8K-797AD Imaginative Math $39.00

PROBLEM SOLVING IN EVERYDAY MATH

This set of step-by-step programs covers an area of essential understanding for special needs students. The individual programs include *The Problem Solving Process,* which tests the student's ability to analyze and check math problems faced in everyday life; *Solving Addition and Multiplication Problems; Solving Subtraction and Division Problems;* and *Solving Multiple Step Problems,* the latter incorporating combinations of addition, subtraction, multiplication, and division problems. The complete set features instructor-control of sound and reading speeds. Includes four diskettes for the Apple II with 48K, plus additional printed support materials.

4V-60 Problem Solving in Everyday Math $165.00



TEASERS BY TOBBS

This problem-solving program develops students' abilities to think through math relationships logically. A grid is presented by an animated character named Tobbs; a succession of math problems appear on the grid, each with a missing number. To solve for the missing part, the student must use deductive reasoning and be able to think through the problem backward as well as forward. These techniques are designed to develop the creative problem-solving skills of your students. The program includes advanced color graphics and animation, six levels of difficulty, and a teacher's guide. Available on disk for the Apple II with 48K; the TRS-80 and Atari with 32K; and on cassette for the TRS-80 with 16K. Grade level is elementary and up; disk programs include a back-up.

8K-133AD Teasers By Tobbs (Apple) $49.00
8K-134RD Teasers By Tobbs (Atari) $49.00
8K-135TC Teasers By Tobbs (TRS cassette) $49.00
8K-135TD Teasers By Tobbs (TRS disk) $49.00

TOBBS LEARNS ALGEBRA

NEW

These skillbuilding programs are an extension of the TEASERS BY TOBBS program described above. TOBBS LEARNS ALGEBRA develops students' hypothesis-making abilities and problem-solving skills. *The Algebra Challenge* presents puzzles that must be completed using given algebraic formulas. In *Detective Tobbs*, students determine the formulas that were used in completed puzzles. *Tobbs Gets Tough* challenges students to determine unusual rules that apply in addition and multiplication puzzles. Grade level is 8 and up; available on disk for the Apple II with 48K and the TRS-80 with 32K. A back-up disk and a teacher's guide are included.

8K-1095AD Tobbs Learns Algebra (Apple) $49.00
8K-1132TD Tobbs Learns Algebra (TRS-80) $49.00

PET & C64 GEOMETRY

64

A set of three programs that cover the basics of geometry. *Perimeter* defines terms; demonstrates the formulas for the perimeters of squares, rectangles, and equilateral triangles; and introduces the topic of circumference of a circle. *Area* presents formulas for the areas of rectangles, squares, triangles, irregular polygons, and circles. *Volume* covers the method of finding the volumes of cubes, cylinders, cones, pyramids, and prisms. Practice problems and a performance summary for each program are included. Available for the Pet with 16K and cassette; and the Commodore 64 with 64K and disk.

6G-1887 Pet Geometry $39.95
6G-1888 C64 Geometry $44.85

GEOMETRY BASICS

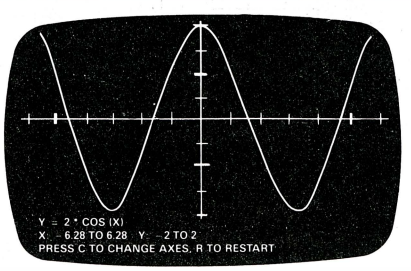
This set of three tutorial programs developed by MECC provides an introduction to the fundamentals of geometry. The first program, *Understanding Points and Angles*, defines and explains points, lines, segments, rays, and degrees, as well as the differences between straight, right, obtuse, and acute angles. The second program is called *Understanding Lines and Triangles*, which covers the parallel, perpendicular, and intersecting elements of lines, segments, and rays; and the definition of a triangle, including right, isosceles, scalene, equilateral, and equiangular. The third program is called *Measuring Up*, covering how parallelograms, rectangles, squares, rhombuses, and trapezoids differ from each other; and exploring the properties of geometric shapes. Graphics clarify the concepts and examples, while questions provide reinforcement of the material. An extensive teacher's guide describes each program, lists the learning objectives, presents lesson plans, illustrates sample runs, and includes reproducible student worksheets. Designed for the Apple II with 32K and disk; grade level is 3 to 6.

8K-004AD Points and Angles $35.00
8K-005AD Lines and Triangles $35.00
8K-006AD Measuring Up $35.00

GEOMETRY FACTS

Five innovative programs designed by MECC that make extensive use of graphics along with definitions and formulas to teach basic geometric shapes. A drill-and-practice program called *Geometric Shapes* leads off, followed by four tutorials with drill-and-practice options entitled *Perimeters, Rectangle and Square Areas, Parallelogram Areas*, and *Trapezoids and Triangle Areas*. An extensive teacher's guide describes each program, lists the learning objectives, presents lesson plans, illustrates sample runs, and includes reproducible student worksheets. Designed for the Apple II with 32K and disk; grade level 6 to 8.

8K-008AD Geometry Facts $35.00



GUESS THE RULE/PLOT

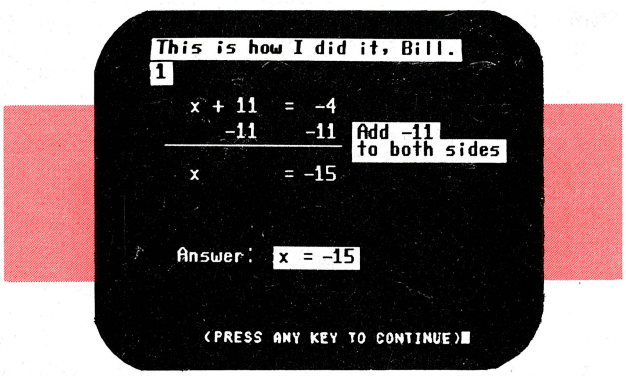
Two valuable programs for the mathematics student. GUESS THE RULE presents an algebra guessing game; the object is to guess the computer's secret equation, with hints provided by ordered pairs that will satisfy the equation's solution set. Features eleven levels of difficulty. The second program, PLOT, displays the graph of any function you choose, including simultaneous equations and conic sections. Includes detailed classroom suggestions; available for the Apple II and the Atari with 32K and disk, and the TRS-80 with 16K and cassette. "...a very exciting program which should be in every algebra and analytic geometry classroom." — *THE COMPUTING TEACHER.*

3M-A03 Guess the Rule/Plot (Apple) $29.95
3M-R03 Guess the Rule/Plot (Atari) $29.95
3M-T03 Guess the Rule/Plot (TRS-80) $29.95

COMPUTER GRAPHING EXPERIMENTS SERIES

Now you can provide genuine mathematical insight for your high school students with this new series of programs from Addison-Wesley. COMPUTER GRAPHING EXPERIMENTS gives students the opportunity to see and work with mathematical graphs immediately — graphs that would take hours to draw by hand for all of the individual problems. With experimentation guided by the accompanying worksheets, students are able to draw conclusions through discovery learning rather than rote drill. Three sets are included: *Algebra 1 & 2*, covering linear and quadratic functions, absolute value, polynomials, exponential and logarithmic functions; *Trigonometric Functions*, covering sine, cosine, tangent, cotangent, period, amplitude, phase shift, and polar coordinates; and *Conic Sections*, covering parabolas, ellipses, hyperbolas, general quadratic functions, and inequalities. Each set contains a program disk, a back-up disk, worksheet masters, and teacher notes. Written for Apple II with 32K. Heighten your students' appreciation and understanding of the world of mathematics with this superb teaching tool!

2E-23480 Computer Graphing Series $235.00



EQUATIONS

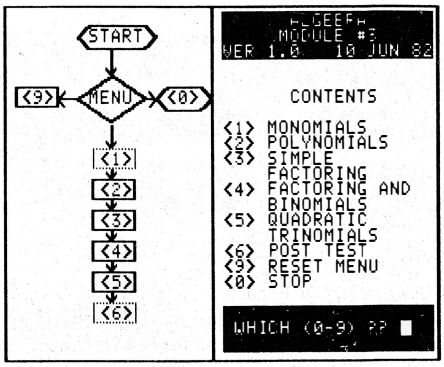
This program generates random equations in the form AX + B = C, where A, B, and C are integers. Students solve the equations step-by-step on the screen; if an error is made, the type of error is diagnosed and flagged by the program and explained to the student. Menu-selected rules are also available to assist the student in completing the problems. The program is designed for students new to solving equations or for those who require remediation. Available on disk for the Apple II, TRS-80, and Atari with 48K, and the IBM and Commodore 64 with 64K.

6V-200AD Equations (Apple) $24.95
6V-200BD Equations (IBM) ..... *New* $24.95
6V-200CD Equations (C64) ..... *New* $24.95
6V-200RD Equations (Atari) $24.95
6V-200TD Equations (TRS-80) ..... *New* $24.95

SOLVING EQUATIONS AND INEQUALITIES

Building skills in solving first degree equations and inequalities is the object of this program, which visually engages students in the problem solving process. Utilizing high resolution color graphics and animation, students work with a scale and algebraic equations to decide how many coins are hidden in a bag depicted on the screen. Practice in simplification and using a physical model to represent mathematical functions are highlighted topics. Available for the Apple II with 48K and disk; grade level is 9 to 12.

8K-1074 Solving Equations and Inequalities $49.00



ALGEBRA SERIES

A powerful mediated instructional system suitable for both adjunct and stand-alone learning. ALGEBRA 1 develops five major content areas: definitions, number line operations, sets, evaluating expressions, and rules for equation reduction. ALGEBRA 2 covers the rules for algebraic addition and subtraction, solving equalities, and solving inequalities. ALGEBRA 3 covers monomials, polynomials, simple factoring, factoring with binomials, and quadratic trinomials. ALGEBRA 4 covers graphing, linear equations, variation, systems, and inequalities. ALGEBRA 5 & 6 covers irrational numbers, radical expressions, square roots, quadratic equations, and quadratic inequalities. The series features high resolution graphics, and utilizes upper and lower case letters to improve clarity. The learner's progress, the concepts learned, and those that were troublesome are compiled at the end of the program. Each set is designed for the Apple II with 48K and disk; ALGEBRA 1 is also available for the IBM PC with 64K and disk. "... should stand as an example for educational software writers." — *COURSEWARE REPORT CARD.*

3L-M35A Algebra 1 (Apple) $39.95
3L-M35B Algebra 1 (IBM) $39.95
3L-M36A Algebra 2 (Apple) $39.95
3L-M37A Algebra 3 (Apple) $39.95
3L-M38A Algebra 4 (Apple) $39.95
3L-M39A Algebra 5 & 6 (Apple) $49.95

LESSONS IN ALGEBRA

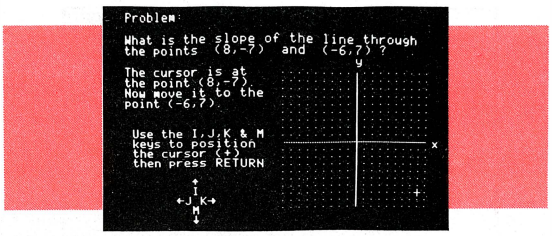
This is a combination drill and tutorial program in algebra, written for the junior high school level by a practicing algebra instructor. Topics include sets, exponents, and the basic postulates of algebra; high resolution characters and a special character generation set (including square root symbols and large brackets for complex fractions) aid in student comprehension of the material. Available for the Apple II with 32K and disk.

3H-GE3 Lessons in Algebra $29.95

FACTORING

Teaching students how to factor polynomial expressions is a difficult task that can be made easier with this package for the Apple II. Four separate programs are featured: *The Distributive Property*, demonstrating how to insert and remove parentheses in the factoring process; *The Factoring Machine*, in which the student can enter an expression and the computer will factor it, step-by-step, at the student's pace; *The Factoring Game*, a competitive practice session monitored by the computer; and *The Scheduled Quiz*, a post-test for students. This "show and tell" program is ideal for junior high and up; available on 32K disk.

6M-3261 Factoring $34.95


Problem:
What is the slope of the line through the points (8,-7) and (-6,7) ?
The cursor is at the point (8,-7). Now move it to the point (-6,7).
Use the I,J,K & M keys to position the cursor (+) then press RETURN
I
J K
M
y
x

ALGEBRA DRILL AND PRACTICE

These two packages cover most of the topics presented in an introductory algebra course, using a drill-and-practice format to supplement the regular classroom instruction. ALGEBRA DRILL I covers algebraic signs; numeric and algebraic functions; percents; equations of lines; simplification of algebraic equations; and word problems. ALGEBRA DRILL II covers solving equations and inequalities; absolute values; integral exponents; factoring linear and quadratic expressions; roots of quadratic equations; parabolic graphs; and linear inequalities. Extensive on-screen instructions are provided, enabling the student to proceed independently if desired. Many sample problems are available, each provided with a detailed, step-by-step solution. Available for the Apple II with 48K and disk.

2W-229A Algebra Drill I $125.00
2W-325A Algebra Drill II $125.00

ALGEBRA BILLIARDS

A drill, tutorial, and game all rolled into one! Utilizing a stimulating game format structured to resemble a game of pool, ALGEBRA BILLIARDS functions as a drill program; upon receiving incorrect answers to questions, it will automatically switch to a tutorial format to guide the student towards achieving improved results. Available on disk for the TRS-80 with 32K and the IBM with 64K; and on cassette for the TRS-80 with 16K.

2X-ALB Algebra Billiards (TRS-80, cassette) $16.95
2X-ALD Algebra Billiards (TRS-80, disk) $21.95
2X-ALM Algebra Billiards (IBM) $24.95

ALGEBRAIC FACTORING

This program teaches first-year algebra students six different methods for factoring polynomials: finding common factors, the difference between two squares, polynomials of the form $AX^2 + BX+C$ when A equals 1 and when A is not equal to 1, grouping, and the sum or difference of two cubes. Examples of each method and a ten-problem quiz for the student are provided; a mastery quiz with questions from each method is also included. Designed for the TRS-80 with 16K and cassette. Grade level is 9 to 12.

8K-1040TC Algebraic Factoring $19.95

ALGEBRAIC EXPRESSIONS

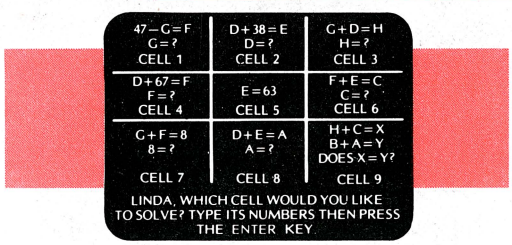
Making algebra easier is the object of this set for junior and senior high school students. The first program is *Rewriting Verbal Phrases;* students practice translating phrases into algebraic terms and solving the stated problem. The use of the comma as it relates to the interpretation of phrases is reviewed. *Evaluating Algebraic Expressions* provides clear, step-by-step examples on how the variables X and Y function in equations. Positive reinforcement and tutorial assistance is provided. Available on disk (back-ups included) for the Apple II with 48K and the TRS-80 with 32K; and on cassette for the TRS-80 with 16K and the Pet with 8K.

3K-240AD Algebraic Expressions (Apple) $49.95
3K-240PC Algebraic Expressions (Pet) $39.95
3K-240TC Algebraic Expressions (TRS, cassette) $39.95
3K-240TD Algebraic Expressions (TRS, disk) $49.95

SENIOR HIGH SCHOOL MATH SERIES

This is a complete package of drill and practice math programs designed for senior high school students. Two sets are available: SERIES 1 covers verbal problems relating to age relationships, interest, mixtures, and currency; geometrical areas; trigonometry; simultaneous equations; and quadratic equations. SERIES 2 covers interest; direct, indirect, and joint relationships; rate relationships; work ratios; arithmetic progressions; geometric progressions; coordinate geometry; linear equations; formula evaluation; exponents; and logarithms. The computer generates a unique set of problems for each student; answers can be checked by the student with the computer or the computer can evaluate and score the student's results automatically. The correct solutions will be displayed for any questions that were missed, and the overall score indicated. Available on 32K disk for the Apple II the TRS-80; and on 64K disk for the Commodore 64 and IBM PC.

6D-M1A Senior High Math 1 (Apple) $200.00
6D-M1B Senior High Math 1 (IBM) $200.00
6D-M1M Senior High Math 1 (C64) $200.00
6D-M1T Senior High Math 1 (TRS) $200.00
6D-M2A Senior High Math 2 (Apple) $200.00
6D-M2B Senior High Math 2 (IBM) $200.00
6D-M2M Senior High Math 2 (C64) $200.00
6D-M2T Senior High Math 2 (TRS) $200.00



MAGIC GRID

Designed for junior high or remedial high school students, MAGIC GRID provides practice and motivation in solving basic algebra formulas. Personalized instruction highlights this unique program which displays nine algebra problems in a grid format; the student selects a problem and solves for the variables which are needed for the remaining problems in the grid. Available for the Apple II and TRS-80 Model I with 32K and disk.

ID-43001 Magic Grid (Apple) $27.95
ID-43003 Magic Grid (TRS-80) $27.95

SOLVING QUADRATIC EQUATIONS

Quadratic equations can be a difficult hurdle; with this program, your students will be able to make the leap into higher mathematics with little difficulty. Random quadratic equations are presented which the student solves by factoring. A detailed explanation is presented for problems that the student is unable to solve. All work is done directly on the screen, allowing the computer to be a true learning device rather than a question-and-answer machine. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 and IBM with 64K; and on cassette for the Pet with 16K. Grade level is 8 to 11.

6V-250AD Solving Quadratic Equations (Apple) ... $24.95
6V-250BD Solving Quadratic Equations (IBM) ..... *New* $24.95
6V-250CD Solving Quadratic Equations (C64) $24.95
6V-250PC Solving Quadratic Equations (Pet) $20.00
6V-250TD Solving Quadratic Equations (TRS-80) $24.95

INTRODUCTORY CALCULUS SERIES

This set of drill-and-practice programs covers maximas and minimas, relative rates, differentiation and integration of algebraic and trigonometric functions, integration of plane figures, volume and surface area of solids, and arc lengths. The computer generates a unique problem for each student. The students can check their own work through the computer, or have the computer grade and evalute their responses. The computer then displays the correct answers for those problems solved incorrectly, and gives an overall score. Available on 32K disk for the Apple II, the TRS-80, and the Pet; and on 64K disk for the Commodore 64 and the IBM PC.

6D-M4A Calculus Series (Apple) $200.00
6D-M4B Calculus Series (IBM) $200.00
6D-M4C Calculus Series (C64) $200.00
6D-M4P Calculus Series (Pet) $200.00
6D-M4T Calculus Series (TRS-80) $200.00

APPLE ALGEBRA

Two programs that cover algebra topics on the Apple II computer. INTRODUCTORY ALGEBRA displays an equation on the screen and the student is asked to input the correct answer. The student's current score and the highest previous score are displayed. SPECIAL PRODUCTS AND ALGEBRAIC FACTORS helps students develop accuracy and speed while working with the distributive law; bi-, tri-, and quadrinomials; and factors. Both programs feature constantly-displayed menu options, an unlimited number of random problems, and timed lessons that add an extra competitive possibility. Available for the Apple II with 48K and disk.

2C-2250 Introductory Algebra $29.95
2C-2260 Special Products & Algebraic Factors $29.95

COMPUTERS IN TEACHING MATHEMATICS

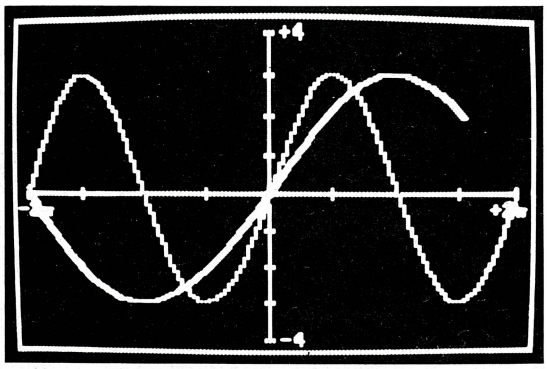
Math teachers across the country have realized the vast potential of computers to address the teaching and learning needs of the mathematics curriculum. Now this practical text demonstrates how you can get computers to work in your school, helping to make math instruction more challenging and rewarding for your students. Both traditional and modern methods for teaching math are covered, as well as how to teach problem solving, programming, and logic. How to become your school's "computer advocate" is also discussed.

2E-10565 Computers in Teaching Mathematics $13.95

ADVANCED MATH

In these thirteen programs developed by MECC, the computer performs the necessary basic numerical calculations so that students are free to concentrate on interpreting the results. The following topics are covered: graphing with Cartesian or polar coordinates; function limits; polynomial roots; single successive approximations of roots; numerical approximations of integrals; data pair approximation by a power, exponential, or polynomial function; line graphs; matrices; row reduction; and linear programs. An extensive teacher's guide describes each program, lists teaching objectives, suggests classroom and follow-up activities, gives background information, illustrates sample runs, and provides student worksheets. Designed for the Apple II with 32K and disk; grade level 11 and up.

8K-009AD Advanced Math $49.00



DISCOVERY LEARNING IN TRIGONOMETRY

The high-resolution graphics in this set of programs give students the opportunity to create and manipulate accurate visual displays of mathematical relationships. With the aid of these graphics, instructors can now effectively teach trigonometric concepts which require visual representation. In DISCOVERY LEARNING, the student is not told the concept or principle; rather, through induction the principle is derived from a series of examples. The program is broken down into several units which operate independently covering the following topics: orientation and free discovery, exploration and observation, holistic graphics, problem solving graphics, identity graphing, and polar coordinates. These units were successfully tested at Albany Junior College in Georgia, where student questions changed from "How do I get the answer?" to "What would happen if I. . . " The set includes a Student Guide, and is available for the Apple II with 48K and disk.

2W-372A Discovery Learning in Trigonometry $75.00

EXPLORATORY DATA ANALYSIS PACKAGE

The programs in this set provide instruction in the field of data analysis in accordance with established data research methods and procedures. Included are examples and applications of stem and leaf displays, letter-value displays, boxplots, x-y plots, resistant lines, data smoothing, coded table displays, median polish, and rectograms. A comprehensive instructional package in applied statistics that is suitable for any advanced mathematics course. Available for the Apple II with 48K and disk.

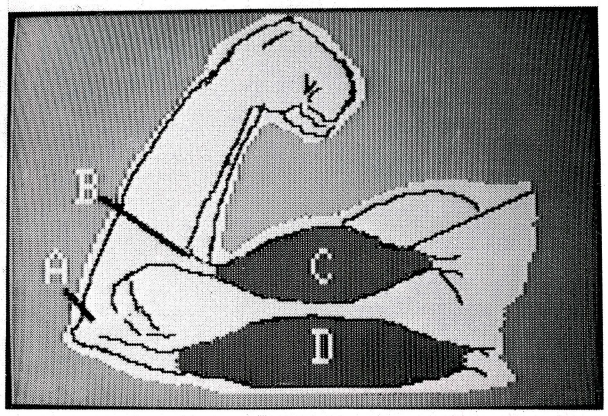
2W-324A Exploratory Data Analysis $165.00

TRIANGLE TRIG

This step-by-step guide is a painless introduction to triangular geometry and beginning trigonometry that reviews all of the necessary mathematical skills. Abundant graphics, careful explanations, and practice with everyday examples make this an excellent tutorial program. Designed for the TRS-80 with 16K and cassette.

4P-0309R Triangle Trig $19.95

Science



YOUR BODY SERIES

64

This two-part series for the junior high school student covers all of the major body systems. The SET 1 programs are entitled *The Human Organism*, *Your Blood*, *Your Digestive System*, and *Your Circulatory System*. SET 2 features *Your Muscular System*, *Your Skeletal System*, *Your Brain and Nervous System*, and *Your Endocrine System*. All of the programs make use of interactive learning-game formats as they instruct in the material, such as a simulated road race through the circulatory system in which students can only proceed by correctly answering questions. "Extra help" information can also be called up by the students as they run the programs. Each set is available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K; and on cassette for the Pet with 32K. Back-up media and a Teacher's Lesson Planner are also included.

3X-0100AD Your Body Set 1 (Apple) $119.00
3X-0100CD Your Body Set 1 (C64) $119.00
3X-0100PC Your Body Set 1 (Pet) $119.00
3X-0100TD Your Body Set 1 (TRS-80) $119.00
3X-0120AD Your Body Set 2 (Apple) $119.00
3X-0120CD Your Body Set 2 (C64) $119.00
3X-0120PC Your Body Set 2 (Pet) $119.00
3X-0120TD Your Body Set 2 (TRS-80) $119.00

EARTH & LIFE SCIENCES

This set of five programs developed by MECC consists of: *Fish*, which utilizes low-resolution graphics to depict the circulatory system of a fish; *Odell Lake*, which explores food chains; *Ursa*, which teaches about constellations; *Quakes*, which simulates earthquakes; and *Minerals*, which has students perform simple tests in order to identify 29 minerals. Reviewers of *Odell Lake* have said, "Students are given clear, immediate, and reinforcing feedback." — *MICROSIFT*. "It can be enjoyed and learned by any age group." — *PURSER'S REVIEWS*. Available for the Apple II with 32K and disk; a back-up disk is included.

8K-993AD Earth & Life Sciences $39.00

VISIFROG

The anatomy and main organs of a frog are illustrated through the use of high resolution graphics in this unique biology program. The student's task is to identify and spell correctly the name of each organ. Additional information regarding each organ's function and the life cycle of the frog is also provided. VISIFROG is certainly the best answer for squeamish students! Available for the Apple II with 48K and disk.

9C-300AD Visifrog $39.95

JUNIOR HIGH SCHOOL SCIENCE

This series of 14 programs in the physical sciences provides instruction on the topics of matter, atoms, bonding, reactions, acids and bases, carbon chemistry, radioactivity, motion, energy, light, sound, electricity, and magnetism. Two-level branching for students who need additional assistance is featured, along with high resolution graphics that illustrate such items as molecular structures, optics, electrical schematics, and light waves. Student names and grades are stored for teacher use. A *Physical Science Baseball* game program is also included in this set for the Apple II with 48K and disk.

5A-CP400AD Junior High School Science $290.00

THE BIOLOGY TEST MAKER

NEW

Creating new and challenging tests for your students can be easy with THE BIOLOGY TEST MAKER. You can develop quizzes and tests of any size from a bank of 900 multiple choice biology questions. Your own questions can be added at any time, and a test that you have created can be easily modified. Questions can be previewed on the screen or on paper before being selected for your test. The question bank is divided into the following categories: *Living Things*, *Genetics*, *Biochemistry*, *Diversity*, *Animals and Plants*, *Ecology*, *Reproduction*, and *Physiology*. Available for the Apple II with 48K and disk; a printer is required.

5A-CB650AD The Biology Test Maker $75.00

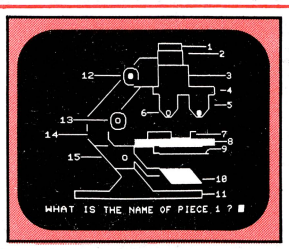
CLASSIFICATION OF LIVING THINGS

NEW

64

The basics of biological classification are presented in this interactive tutorial. Scientific naming and the major divisions of the five-kingdom system are discussed, and a classification "bank" of unusual plants and animals is included. The student will discover the value of and the need for the classification system, while the program monitors comprehension and vocabulary recognition. Grade level is 7 to 10; available on disk for the Apple II with 48K and the Commodore 64 with 64K; a back-up disk is included.

3K-260AD Classification of Living Things (Apple) $59.00
3K-260CD Classification of Living Things (C64) ... $59.00



PARTS OF THE MICROSCOPE

This program uses an excellent graphic representation of a microscope to assist the student in identifying the various parts by location and function. The lesson begins with each part of the microscope being high-lighted as its purpose is explained. In the following drill section, the student recalls each part and its function. If the student answers incorrectly, the program branches to an explanation section. Positive reinforcement is featured. Available on disk for the Apple II with 48K and the TRS-80 with 32K (back-ups included); and on cassette for the Pet with 8K and the TRS-80 with 16K. Grade level is junior high and up.

3K-150AD Parts of the Microscope (Apple) $29.95
3K-150PC Parts of the Microscope (Pet) $19.95
3K-150TC Parts of the Microscope (TRS, cassette) $19.95
3K-150TD Parts of the Microscope (TRS, disk) ..... *New* $29.95

CELLS

This set of two programs is informative, motivational, and fun. *Basic Cell Structure* is a graphic representation of the basic parts of a cell, showing how dissolved nutrients pass through the cell membrane while larger particles are kept out, and includes a demonstration of an amoeba extending a pseudopod. *Cell Division* covers the subject of cell reproduction in a step-by-step animated sequence showing mitosis, membrane expansion, and the two resulting cells. Both programs feature a drill section after the tutorial; incorrect answers will prompt branching to tutorial explanations. Available on disk for the Apple II with 48K and the TRS-80 with 32K (back-ups included); and on cassette for the Pet with 8K and the TRS-80 with 16K. Grade level is 3 to 9.

3K-140AD Cells (Apple) $49.95
3K-140PC Cells (Pet) $45.95
3K-140TC Cells (TRS, cassette) $45.95
3K-140TD Cells (TRS, disk) ..... *New* $49.95

OSMOSIS AND DIFFUSION

Graphics are used in this simulation to depict one of the vital life processes: the flow of matter across a semi-permeable membrane. Students conduct a computer experiment controlling cell temperature, membrane pore size, solubility, and electrical charge in order to reach equilibrium. Included with the program are a study guide and a set of 25 student lab booklets. Available on 48K disk for the Apple II and TRS-80; grade level is 9 to adult.

4C-A313 Osmosis and Diffusion (Apple) $41.00
4C-T314 Osmosis and Diffusion (TRS-80) $44.00

COMPETE

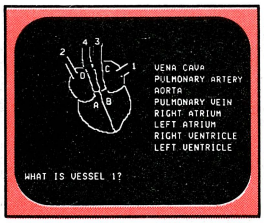
This unit of seven investigations concerning interactions between flowering plants is designed around real experiments, simulated experiments, and data in the form of graphs and tables. The computer simulation allows students to plan and carry out investigations without the long delay usually associated with growth experiments. Includes six copies of student notes with exercises and a teacher's guide. Available for the Apple with 48K and disk, the TRS-80 Model I with 32K and disk, and the Pet with 48K and cassette.

2W-182A Compete (Apple) $45.00
2W-182T Compete (TRS-80) $45.00
2W-182P Compete (Pet) $45.00

POPULATION SERIES

This set of five science simulations will be of tremendous value to all students of biology, anthropology, or sociology. *Life* is a biological simulation in which "individuals," displayed in a grid format, reproduce, maintain, or extinguish themselves according to a set of formal rules. Among the possible variations are growth, change, differentiation, expansion, and crowding. *Growth* is based on the relationship between population and environment, and allows input of variable environmental influences to test possible outcomes. In *Interactions*, communities interact in various ways that enhance or decrease each other's chances for survival. Relationships evolving from competitive situations are explored. *Profiles* demonstrates the reproductive capabilities of populations through pyramidal or columnar distribution; a number of variables may be introduced into the system and the effects observed. *Evolution* illustrates the changes that occur among specified organisms when they are no longer able to exchange genes with related populations. The entire series of five disks is available for the Apple II with 48K.

2V-B10 Population Series $265.00



HEART LAB

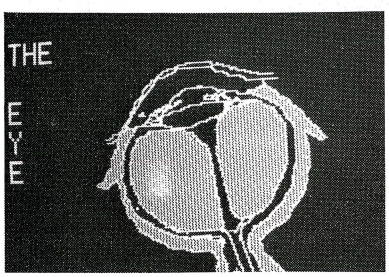
This innovative program uses animated graphics to produce a simulation of a functioning human heart. The various parts and functions of the heart are illustrated by showing the pumping action and tracing the blood flow through the arteries, veins, and chambers. Three sections are included: a tutorial reviewing the various vessels and chambers; a drill wherein the student identifies the specific parts of the heart as indicated by the computer; and a pulse simulation exercise where the students enter their own pulse rates before and after exercise to visually observe the effect on the heart's action. Available on disk for the Apple II with 48K and the TRS-80 with 32K (back-ups included); and on cassette for the Pet with 8K and the TRS-80 with 16K.

3K-DK21000A Heart Lab (Apple) $39.95
3K-CP21000T Heart Lab (TRS-80, cassette) $29.95
3K-DK21000T Heart Lab (TRS-80, disk) ... *New* $39.95
3K-CP21000P Heart Lab (Pet) $29.95

SYSTEMS OF THE HUMAN BODY

Colorful high resolution graphics are utilized to present students with information on the various systems comprising the human body. The topics covered are *The Skin*, *The Bones*, *Circulation*, *Muscles*, *Digestion*, and *Respiration*. The tutorial sections consist of two parts: a graphic representation of the body part with captions, and a text presentation with comprehension activities. Other sections featured in each program include *Vocabulary* and *Final Test*. A student record management system is provided. Available for the Apple II with 48K and disk; designed for intermediate and junior high level.

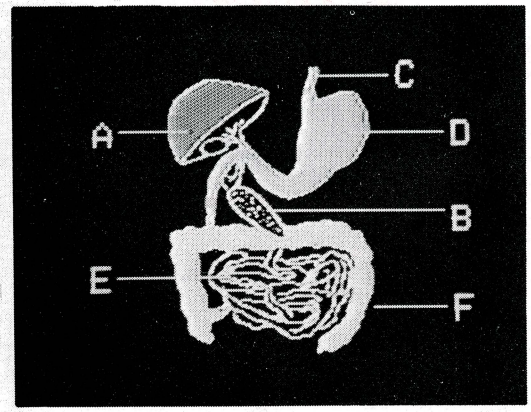
5K-101AD The Skin $29.95
5K-102AD The Bones $29.95
5K-103AD Circulation $29.95
5K-104AD Muscles $29.95
5K-105AD Digestion $29.95
5K-106AD Respiration $29.95
5K-100AD Systems of the Human Body (Set of 6 above) $150.00



SENSES

SENSES utilizes high resolution graphics to display parts of the human sense organs; the challenge for the student is to identify and spell correctly these basic parts of the eye, ear, tongue, nose, and skin. After the student has correctly identified a specific part, interesting facts about the function of that part are presented. Available for the Apple II with 48K and disk.

9C-200AD Senses $39.95



COMPUTER BIOLOGY

The programs in this set provide instruction and reinforcement of the following topics: cells, transport, asexual reproduction, excretion, locomotion, photosynthesis, the reproduction of plants, biological classification, respiration, genetics, the endocrine system, biochemistry, digestion, and the nervous system. Each program will branch to subprograms for review when the student is having difficulty; background information is also available on each topic. Names, grades, and student progress is automatically recorded. Each program is from 30 to 60 minutes long, and is available for the Apple II with 48K and the TRS-80 Model III with 32K and disk.

5A-CB610AD Computer Biology (Apple) $250.00
5A-CB610TD Computer Biology (TRS-80) $225.00

THE EAR

The various parts of the outer, middle, and inner ear are presented in this high resolution program. Students see the shape and location of each part in logical working order; vibration and movement, and the effect of adjoining parts, are demonstrated. A tutorial on each part of the ear is presented as its picture is displayed. Both common and Latin terminology is utilized; grade level is junior high and up. Available for the Apple II with 32K and disk.

6M-3321 The Ear $24.95

CIRCULATORY SYSTEM

A useful program for any biology or physiology classroom, this set illustrates pulmonary and systemic circulation. Preliminary descriptions of the blood, heart, arteries, capillaries, veins, and lungs precede the introduction of the circulatory information. Extensive graphics and post-topic quizzes highlight this program for junior high school level and up. Available for the Apple II with 32K and disk.

6M-3091 Circulatory System $29.95

MENDELIAN GENETICS

Emphasis on problem-solving and building scientific models highlights this interactive program. Students begin with a simple "tentative explanation" of how traits are inherited; they compare this information with new observations, and sequentially throughout the tutorial are required to observe, explain, predict, test, and modify new concepts until they arrive at a comprehensive explanation. Each section ends with a self-test and summary on the material as it has been developed to that point.

2V-AP5 Mendelian Genetics (Apple, 48K, disk) $60.00

COMPUTERS IN BIOLOGY

COMPUTERS IN BIOLOGY is a comprehensive set of programs with the facility for simulation and model building as well as computation and data retrieval. *Inheritance* simulates the inheritance of characteristics for three species of animals and one species of plant; *Predator-Prey* is a model of ecosystem relationships; *Pond Ecology* simulates a freshwater community consisting of three trophic levels; *Transpiration* is a simulation of water loss by leaves; *Concurrent Systems* simulates exchanger and multiplier systems of the body; *Human Energy Expenditure* replicates 72 activities and their energy usage relative to sex and body mass; and *Statistics for Biology* computes simple statistics for the introductory biology student. Extensive documentation is included in a loose-leaf format in order to provide for complete flexibility in presentation. Available for the Apple II with 48K and disk.

2W-205A Computers in Biology $100.00

EXPERIMENTS IN HUMAN PHYSIOLOGY

Students use the computer as a tool to measure and record actual physical responses with this innovative computer series. Utilizing accurate detectors of pulse rate, respiration rate, skin temperature, and reaction times, students can record their own and fellow students' physical reactions in real-time directly on the computer display. Ten experiment programs can be conducted: *heart rate measurements; reaction time measurements: homeostasis; reaction time investigations; physiology of exercise: physiology of stress; physiology of sleep; psychology applications; temperature measurements;* and *calibration functions.* The complete package includes the programs on disk; three probes (no electrical contact to subjects is required); and an interface box that connects to the Apple game-paddle ports without interference to normal paddle operation. Documentation includes a user's guide, activities, and data sheets for recording results. Available for the Apple II with 48K.

HR-502AD Experiments in Human Physiology ...$250.00

TRIBBLES: THE SCIENTIFIC METHOD

This program introduces the scientific method of problem solving with a written tutorial and computer simulation. The tutorial presents students with a problem and guides them to its solution. The computer simulation provides the data for making observations, forming tentative explanations, and testing predictions. To eliminate the variable of background knowledge, the problem takes place on an alien planet inhabited by "Tribbles." Five copies of the Student Tutorial are included with the program; individual copies are also available. Available for the Apple II with 48K and disk.

2W-248A Tribbles: The Scientific Method $40.00
2W-248M Tribbles Student Tutorial $3.00

REPRODUCTION PROCESS

This program illustrates the reproduction process from conception through the nine months of pregnancy to birth in a clear, sensitive manner. With full menu-control, the program will review the systems involved, describe the major organs, present a student quiz, and provide for user control over the amount of material to be covered. Grade level is junior high and up; available for the Apple II with 32K and disk.

6M-3191 Reproduction Process $29.95

IDENTIFYING MINERALS

A "mountain climbing" expedition provides the setting for students to test their knowledge about minerals; the computer poses questions, and each correct answer results in the chance to use a different climbing tool. Among the mineral properties covered are color, streak, luster, hardness, cleavage, and fracture. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K; and on cassette for the Pet with 32K. Grade level is 8 to 12; a back-up disk and teacher's manual are included.

3X-2000AD Identifying Minerals (Apple) $39.00
3X-2000CD Identifying Minerals (C64) $39.00
3X-2000PC Identifying Minerals (Pet) $39.00
3X-2000TD Identifying Minerals (TRS-80) $39.00

EARTH SCIENCE SERIES

This series of twelve programs is designed to teach fundamental earth science concepts covered in junior and senior high school. Tutorial information is presented and illustrated with graphics; problems and simulations are provided to reinforce student understanding. The topics covered include gradients; heat energy; latitude and longitude; basic chemistry; stream erosion; water budgeting; seismic waves; earth history; seasons; meteorology; and percent error. Also, a *Lab Aid* program is included which contains 21 of the most common formulas used in lab experiments to assist the student with problems, and a *Graph* routine for creating graphs of lab results. The complete series includes a manual covering series objectives, the formulas employed, all questions and answers, and student user instructions, plus student worksheets. Available for the TRS-80 on 16K cassette and 48K disk.

8X-TESS3 Earth Science Series (cassette) $68.50
8X-DESS3 Earth Science Series (disk) $78.50

INTRODUCTION TO WEATHER CHARTS

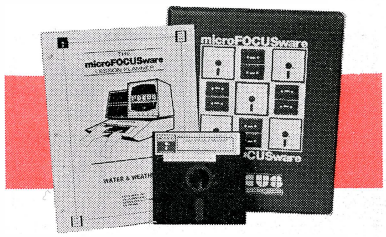
This useful program provides testing on various topics related to meterological charts, including air masses, pressure zones, synoptic charts, and basic weather patterns. Features include high-resolution graphics, animation, and complete student monitoring; incorrect responses are followed by review questions to reinforce the relevant principles. The instructor may obtain detailed reports on performance of individual students or an entire class. Grade level is 11 to 12; available for the Apple II with 48K and disk.

2C-2170 Introduction to Weather Charts $29.95

SCIENCE SIMULATIONS

This disk features eight programs developed by MECC. They include *Pest*, which deals with the use of pesticides; *Cell Membrane*, wherein the user "impersonates" a cell membrane; *Snell*, which plots light refraction; *Collide*, which simulates the collision of two bodies; *Diffusion*, which deals with the diffusion rates of various gasses; *Nuclear Simulation*, which shows the radioactive decay of nine different radioisotopes; and *ICBM* and *RADAR*, which teach angles and projections on a coordinate system. Available for the Apple II with 32K and disk (back-up included).

8K-799AD Science Simulations $39.00



WATER AND WEATHER

These three programs for the junior high school student introduce the basics of weather phenomena. The topics covered include *The Water Cycle*, *Humidity*, and *Clouds and Precipitation*. Each program makes use of an interactive learning-game format in which the student must answer questions on the material in order for the game to proceed. Back-up media and a Teacher's Lesson Planner are included; available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K; and on cassette for the Pet with 32K.

3X-2200AD Water and Weather (Apple) $89.00
3X-2200CD Water and Weather (C64) $89.00
3X-2200PC Water and Weather (Pet) $89.00
3X-2200TD Water and Weather (TRS-80) $89.00

AIR & WATER POLLUTION

Here are two programs that focus on environmental problems. AIR POLLUTION allows the student to assume the role of an environmental planner; computer experiments are conducted with auto traffic speed, wind speed, and other variables that affect carbon monoxide levels. WATER POLLUTION presents an investigation into the environmental effects of man-made waste on fish and other aquatic animals. Among the variables tested in the computer experiment are water temperature, type of waste, sewage dumping rate, type of treatment, oxygen level, and size of water body. Available on disk for the Apple II and TRS-80 with 48K; each unit includes a set of 25 student lab booklets. Grade level is 7 and up.

4C-A450 Air Pollution (Apple) $37.00
4C-T450 Air Pollution (TRS-80) $38.50
4C-A460 Water Pollution (Apple) $29.50
4C-T460 Water Pollution (TRS-80) $31.75

GEOLOGY PACKAGE

A set of four programs that cover the basics of the geological timetable in a multiple-choice question format; incorrect responses display immediate feedback to assist the student in determining the correct answer. Included are *Time Duration of Epochs and Periods*, *Types of Animal Life Present*, *Types of Plant Life Present*, and *Geological Conditions Present*. The package is available for the TRS-80 with 16K and cassette and with 32K and disk. A back-up disk is included with the disk version.

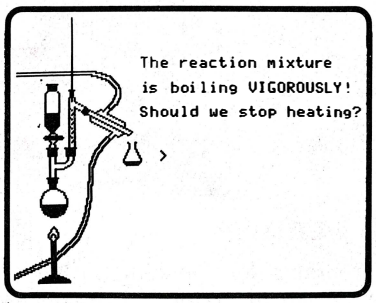
6C-ED020 Geology Package (cassette) $39.95
6C-ED019 Geology Package (disk) $39.95

STRUCTURE OF LEAVES

No need for crumbly leaves and microscopes with this program! STRUCTURE OF LEAVES is a software program dealing with the internal and external structure of leaves. Included in the investigation are the processes of photosynthesis and respiration, and the difference between monocot and dicot leaves. Colorful graphics illustrate each concept; hints and a vocabulary list can be accessed by the students during the review segments. Available for the Apple II with 48K and disk; a back-up disk and a user's guide are included.

ID-5150 Structure of Leaves $59.50

Science



ORGANIC CHEMISTRY

These programs are designed as a comprehensive supplement to a first course in organic chemistry. They provide an introduction to and practice with problems related to simple reactions of alkenes, alkyl halides, alcohols, aldehydes and ketones, carboxylic acids and arenes. Also included in the seven-disk set are substitution reactions and IR and NMR spectroscopy. Developed by Stanley Smith of the University of Illinois, this extensive series features high-resolution graphics and numerous lab experiment simulations. "...I have been a chemistry teacher for 12 years, yet this product served to improve my understanding of several of the topics." —*INFOWORLD.*

2V-C20 Organic Chemistry (Apple, 48K, disk) $375.00

WRITING CHEMICAL FORMULAS

Many students who understand and enjoy chemistry have difficulty with this topic. Working from a base of more than 120 compounds, this program will introduce and provide practice in the writing of chemical formulas. If a formula is written incorrectly the computer will guide the student through the process in a step-by-step manner, including oxidation states, balancing of positive and negative charges, and other relevant factors. The program makes use of upper and lower case letters and subscripts. Available for the Apple with 48K and disk; high school level.

6V-350AD Writing Chemical Formulas $24.95

CHEMISTRY SERIES

This series of drill-and-practice programs for the high school student contains six sets of material: *Chemistry 1* includes specific heat capacity, calorimetry, heats of fusion and vaporization, and specific gas laws; *Chemistry 2* includes Faraday's Law, gram-molecular mass, the Mole concept, and symbols and valences drill; *Chemistry 3* covers naming of compounds, compound formulas, gas law analysis, and calorimetry analysis; *Chemistry 4* includes concepts of molarity, normality, molality, and percent concentration relationships; *Chemistry 5* deals with general stoichiometry questions, mass/mass, mass/volume, and volume/volume relationships; and *Chemistry 6* covers the pH concept, EMF of electro-chemical cells, chemistry analysis, and stoichiometry analysis. CHEMISTRY SERIES 1 includes sets 1, 2, and 3; CHEMISTRY SERIES 2 includes sets 4, 5, and 6. Available for the Apple II and TRS-80 with 32K and disk; and the Commodore 64 and the IBM PC with 64K and disk.

6D-C1A Chemistry Series I (Apple) $200.00
6D-C1T Chemistry Series I (TRS-80) $200.00
6D-C1C Chemistry Series I (C64) $200.00
6D-C1B Chemistry Series I (IBM) $200.00
6D-C2A Chemistry Series II (Apple) $200.00
6D-C2T Chemistry Series II (TRS-80) $200.00
6D-C2C Chemistry Series II (C64) $200.00
6D-C2B Chemistry Series II (IBM) $200.00

COMPUTER CHEMISTRY

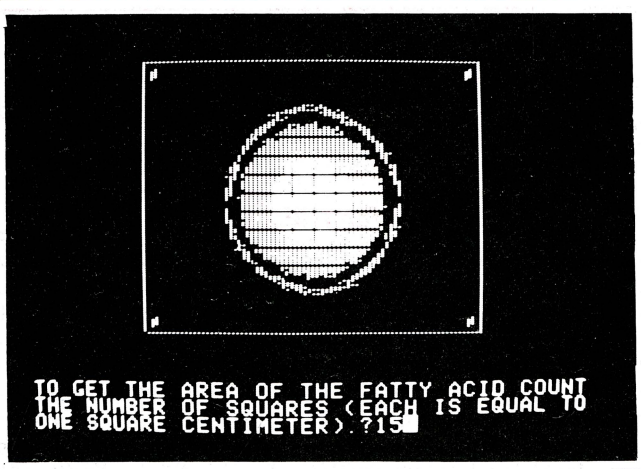
This comprehensive set of programs provides computer assisted instruction for high school and junior college chemistry classes. The topics covered include: gas relationships, moles and formulas, chemical equations, solutions, the Periodic Table, electron structure, bonding in molecules, bonding between molecules, kinetics, electrochemical cells, oxidation and reduction, acid-base theories and problems, and organic chemistry. Each program teaches and reviews the main concepts of the selected topic. No two students get exactly the same questions, and each program requires from 20 to 30 minutes to complete. Available on disk for the Apple II with 48K and the TRS-80 with 32K. "...these are solid, functional programs for high school chemistry students."—*COURSEWARE REPORT CARD.*

5A-510AD Computer Chemistry (Apple) $250.00
5A-500TD Computer Chemistry (TRS-80) $225.00

CHEMISTRY

This set of three programs for the junior high school student introduces the basics of chemistry. The topics covered are *The Three States of Matter, Atomic Structure and Bonding,* and *Acids and Bases.* The programs make use of an interactive learning-game format in which the student must answer questions on the material in order for the game to proceed. Back-up media and a Teacher's Lesson Planner are included; available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K; and on 32K cassette for the Pet.

3X-1500AD Chemistry (Apple) $89.00
3X-1500CD Chemistry (C64) $89.00
3X-1500PC Chemistry (Pet) $89.00
3X-1500TD Chemistry (TRS-80) $89.00



CHEM LAB SIMULATION SERIES

This series of programs simulates several common lab applications; they can be used to demonstrate actual lab procedures and assist students in gaining a better understanding of the typical calculations needed to process lab data. Set #1 covers acid-base titration, Avogadro's number, weak acid equilibrium constant, and pH meter simulation; Set #2 covers the ideal gas law, kinetic molecular theory, and diffusion. A manual accompanies each set, and explains the theories behind the experiments, formulas and sample calculations. These sophisticated interactive simulations utilize graphic displays and are designed for high school and college level chemistry courses. Available on disk for the Apple II with 48K and disk.

2W-339A Chem Lab Simulation #1 ..... $133.00
2W-340A Chem Lab Simulation #2 ..... $133.00

FUNDAMENTAL SKILLS FOR GENERAL CHEMISTRY

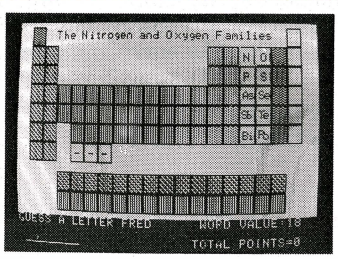
This set of interactive programs includes both drill-and-practice exercises and simulations, and is designed to reinforce understanding of topics or mastery of skills. The problems can be self-graded by the students, and are written on a high school-to-college level. The topics include balancing equations; metric/English conversions; density, mass, and volume; symbols, atomic numbers, and electron configurations; exponential notation; ion symbols and charges; formula weights; names and formulas of common compounds; significant figures; and temperature conversions. Available on 32K disk for the Apple II and TRS-80; on 64K disk for the Commodore 64; and on 16K cassette for the TRS-80 and the Pet.

7D-C10AD Fundamental Skills (Apple) $170.00
7D-C10CD Fundamental Skills (C64) $170.00
7D-C10PC Fundamental Skills (Pet) $170.00
7D-C10TC Fundamental Skills (TRS, cassette) ...$170.00
7D-C10TD Fundamental Skills (TRS, disk) $170.00

THE CHEMISTRY TEST MAKER

Create exams for your chemistry students quickly and easily with THE CHEMISTRY TEST MAKER. You can develop quizzes and tests of any size from a bank of 750 multiple choice chemistry questions. Your own questions can be added at any time, and a test that you have created can be easily modified. Questions can be previewed on the screen or on paper before being selected for your test. The question bank is divided into the following categories: *Atomic Structure, Acids and Bases, Bonding, Periodic Table, Matter and Energy, Stoichiometry, Kinetics, Equilibrium, Oxidation-Reduction,* and *Organic Chemistry.* Available for the Apple II with 48K and disk; a printer is required.

5A-550AD The Chemistry Test Maker $75.00



CHEM-AID

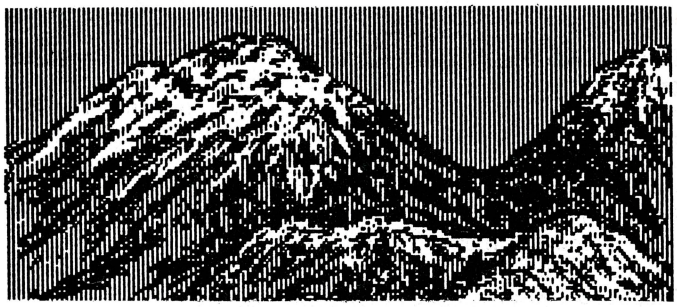
Students learn the names and symbols of the elements in the Periodic Table with this colorful program. The challenge is to identify and spell correctly the name of each element when shown the group of which the element is a member, the position of the element in the table, and its symbol. Basic facts about each element are also presented, including the atomic number, atomic structure, typical uses, and characteristics. Available for the Apple II with 48K and disk; high resolution graphics are featured.

9C-100AD Chem-Aid $39.95

THE SCIENTIFIC METHOD

This program investigates the why and how of the scientific method, including: *Observation*, the use of the senses; *Generalization*, the stating of a hypothesis; *Measurement*, the pursuit of precision; and *Verification*, the utilization of experimentation. This program is designed for a junior and senior high school level; running time is approximately 15 to 30 minutes. Available for the Apple II with 48K and disk.

6M-4011 The Scientific Method $19.95



VOLCANOES

This highly-rated simulation puts a group of 2, 3, or 4 students in charge of a team of volcanologists whose assignment is to study and predict the eruption of an unstable volcano, as well as warn the nearby populace of any impending danger. Various scientific investigations are conducted to measure and evaluate the volcano's condition. Not only does the program promote a thorough understanding of volcanoes, but scientific methods of deduction and good record-keeping skills are developed. Spectacular high-resolution graphics and truly student-motivating interaction with the computer are among the unique features of VOLCANOES, which is designed for the Apple II with 48K and disk. "VOLCANOES clearly demonstrates the educational power of a well-conceived simulation." — *CLASSROOM COMPUTER NEWS.*

3G-100AD Volcanoes $49.50

COMPUTER CHEMISTRY PROGRAMS

These interactive chemistry programs include both drill-and-practice exercises and simulations, and are designed to reinforce understanding of a topic or mastery of a skill. The problems can be self-graded by the students, and are written on a high school-to-college level. *Chemistry With a Computer* includes problems on metric units of length, mass, and volume; equilibrium constants; concentrations; pressure-volume-temperature combinations; solubility products and curves; gram-mole relationships; oxidation-reduction systems; molarity; and dilution. *Acid Base Chemistry* covers acid-base equilibria; pH changes in buffer solutions; Bronsted and conjugate acids and bases; pOH for solutions; moles, grams, and molarity; and titration curve plotting. *Atomic Structure* covers protons, neutrons, and electrons; relative ionization energies; the octet rule; oil drop experiments; energy levels and spectral lines in a hydrogen atom; the Periodic Table; and the VSEPR method of predicting hybridization. Each unit is available for the Apple II with 32K and disk.

7D-C20AD Chemistry with a Computer $170.00
7D-C30AD Acid Base Chemistry $170.00
7D-C40AD Atomic Structure $170.00

THE MOLECULAR ANIMATOR

An ideal program for chemistry instruction, MOLECULAR ANIMATOR allows the teacher to construct and display any type of molecular stucture on the screen, and rotate it at various speeds around all three axes. The molecular model is easily plotted using an editor routine; the instructor enters coordinates, graphically designates atoms such as hydrogen and carbon, and in no time at all, a moving molecule is created! Sample molecules are included on the disk. Why try to show a three-dimensional molecule on a flat page when you can use THE MOLECULAR ANIMATOR? Available for the Apple II with 48K and disk.

2V-C40 Molecular Animator $75.00

Science

MATTER AND ENERGY

This set of six programs utilizes an interactive learning-game format, covering *Elements, Compounds, Mixtures, Physical and Chemical Changes, Potential and Kinetic Energy,* and *Energy Changes.* The games require the student to answer questions about the material in order for the game to proceed; for example, correct answers to questions about energy allow assembly of a rocket ship to return from a remote planet. The set is geared for junior high school students and comes with back-up media and a Teacher's Lesson Planner. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K; and on cassette for the Pet with 32K.

3X-1000AD Matter and Energy (Apple) $159.00
3X-1000CD Matter and Energy (C64) $159.00
3X-1000PC Matter and Energy (Pet) $159.00
3X-1000TD Matter and Energy (TRS-80) $159.00

PHYSICS

This series provides an introduction to the fundamentals of physics. FREE FALL features graphic simulations of planet trajectories, restitution of a bouncing ball, vertical flight path, shooting arrows at a target, and dropping water bombs on a forest fire. WAVES & OPTICS covers light beam reflections, light refraction in water, wave properties and superposition, radar and sonar beams, and the electromagnetic spectrum. LAB PLOTS utilizes graphic analysis of data to determine applicable laws of nature that correspond to certain experiments, which include storm duration vs. storm size, star illumination vs. distance, violin string length vs. pitch of note, rocket fuel consumption vs. rocket speed, and more. Each disk is available for the Apple II with 48K.

3N-200AD Free Fall $36.00
3N-225AD Waves & Optics $36.00
3N-250AD Lab Plots $36.00

TOPICS IN CHEMISTRY AND PHYSICS

Science takes on a new meaning in the classroom when the computer serves as a lecture and demonstration source. These programs, designed by MECC, cover solubility products, precipitates, Charles's Law, Boyle's Law, and electron charges. Graphics highlight each of the tutorials. An extensive teacher's guide is included, which features program descriptions, learning objectives, lesson plans, sample runs, and student worksheets. Designed for the Apple II with 32K and disk; grade level is 10 to 12. A back-up disk is included.

8K-1036AD Topics in Chemistry & Physics $39.00

NEWTON

Using this program to simulate Newton's experiments, students are able to investigate Newton's Law of Gravitation and Second Law of Motion, and the relationship between these models using satellite orbit simulations. Includes six copies of student notes with exercises and a teacher's guide. Available for the Apple II with 48K and disk, the TRS-80 Model I with 32K and disk, and the Pet with 8K and cassette.

2W-130A Newton (Apple) $45.00
2W-130P Newton (Pet) $45.00
2W-130T Newton (TRS-80) $45.00

PHYSICS SERIES

This series of drill-and-practice programs covers the fundamentals of physics. The computer generates a unique set of problems for each student; answers can be checked by the student with the computer or the computer can evaluate and score the student's results automatically. The correct solutions will be displayed for any questions that were missed, and the overall score indicated. Two sets are available: SERIES 1 covers linear kinematics; speed versus time; projectile motion; linear momentum; impulse and kinetic energy; particle motion; inelastic collisions; circular motion; pulley systems; work efficiency; specific heat capacity; vector systems; and calorimetry analysis. SERIES 2 covers isobaric processes; molar heat capacity; Charles' Law; the First Law of Thermodynamics; wave patterns; photoelectric emissons; circuits; resistance; potential difference; electric field analysis; charged particle transfer; gas law analysis; internal light reflections; convex and concave mirrors; light refraction; and optics analysis. Available on disk for the Apple II and TRS-80 with 32K, and the IBM and Commodore 64 with 64K.

6D-P1A Physics Series 1 (Apple) $200.00
6D-P1B Physics Series 1 (IBM) $200.00
6D-P1M Physics Series 1 (C64) $200.00
6D-P1T Physics Series 1 (TRS) $200.00
6D-P2A Physics Series 2 (Apple) $200.00
6D-P2B Physics Series 2 (IBM) $200.00
6D-P2M Physics Series 2 (C64) $200.00
6D-P2T Physics Series 2 (TRS) $200.00

PLATO PHYSICS

In this unit from Control Data's PLATO software series, students are shown a physics problem and must assemble missing information in order to solve it. The object is to calculate the answer using the least possible amount of information. Available for the Apple II and the Atari with 48K and disk, PLATO PHYSICS has been thoroughly tested and proven in the academic community. Senior high school level.

8L-4080 Physics (Apple) $70.00
8L-5080 Physics (Atari) $70.00

COMPUTER PHYSICS

A series of twelve programs on high school and junior college-level physics. Topics covered include *Circular Motion, Newton's Laws, Acceleration, Uniform Motion, Free Fall, Projectile Problems, Momentum, Work and Energy, Sound, Waves, Heat,* and *Gas Laws.* Each program features high-resolution graphics, changing variables in questions and experiments, and storage of student scores. A comprehensive set for the scientific classroom, available for the Apple II with 48K and disk.

5A-CP800AD Computer Physics $195.00

SIMPLE MACHINES

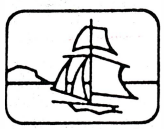
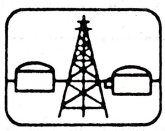
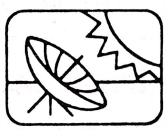
This program reviews the principles and applications of six simple machines: the lever, the pulley, the wheel and axle, the inclined plane, the wedge, and the screw. Instruction, illustrative examples, and exercises are provided for each machine. Review opportunities are available throughout the program, and a concluding mastery quiz will enable the students to evaluate their understanding of the material. Grade level is junior high and up. Available for the Apple II with 32K and disk.

6M-3101 Simple Machines $29.95

THREE MILE ISLAND

This is a realistic simulation of a pressurized nuclear reactor for the Apple II. Four spectacular graphic displays are provided to monitor the containment building, turbines, filters, condensers, the reactor core, and the pump house. Valves, pumps, and control rods are individually activated by keyboard command. The comprehensive documentation details the operating mechanisms and component interactions. Requires 48K and disk.

6E-160 Three Mile Island $39.95

THE SEARCH SERIES

These five outstanding simulations by McGraw-Hill promote critical thinking and communication skills while teaching a variety of social studies and science material. Teamwork and cooperation are the essential characteristics of the SEARCH SERIES, which is designed to be used simultaneously by groups of students or by an entire class. Each student is responsible for recording information on a specific resource or function during the group's search, without which they cannot proceed. Each set comes in a vinyl binder with teacher's manual, 20 student handbooks, and a diskette that will manage the record-keeping for up to 100 classes and 3000 students while on their learning adventure! Grade level is 5 through 12, but we have also seen a group of school administrators enthusiastically using and enjoying the SEARCH SERIES! Available on disk for the Apple II with 48K and the TRS-80 with 32K.

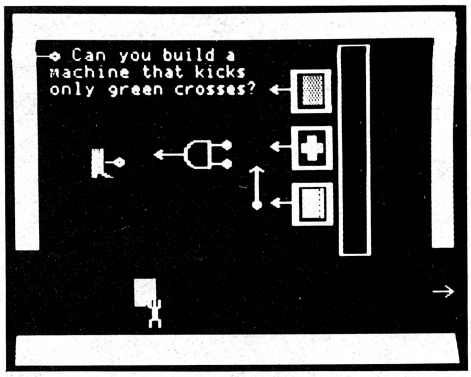
5Y-005AD Geography Search (Apple).....$180.00
5Y-104TD Geography Search (TRS-80).....$180.00
In GEOGRAPHY SEARCH, students sail for the New World on ancient ships. They navigate with the computer, using the sun, ocean depth, climate, and the Trade Winds.

5Y-001AD Archeology Search (Apple).....$180.00
5Y-106TD Archeology Search (TRS-80).....$180.00
ARCHEOLOGY SEARCH charges student research teams with the task of organizing the excavation of a newly discovered historical site. They will collect data and formulate theories about the origins of the people who once lived there.

5Y-004AD Geology Search (Apple).....$180.00
5Y-103TD Geology Search (TRS-80).....$180.00
GEOLOGY SEARCH sends teams to explore for oil. As the computer performs geological tests, the students learn about rocks, fossils, and underground structures in order to make decisions on drilling.

5Y-006AD Community Search (Apple).....$180.00
5Y-105TD Community Search (TRS-80).....$180.00
COMMUNITY SEARCH sets students down in an ancient society forced to leave its ancestral home. They face choices about migration, occupations, aggression, and shelter.

5Y-002AD Energy Search (Apple).....$180.00
5Y-107TD Energy Search (TRS-80).....$180.00
In ENERGY SEARCH, students manage an energy factory and recreate the exciting steps in the search for new energy sources.



ROCKY'S BOOTS

This fascinating game helps students build a basic groundwork in logic skills in a stimulating way. Students assemble a "logic machine" piece-by-piece, moving graphic "parts" on the screen and testing each one individually and as part of the whole machine. Each test is accompanied by graphics and sound originating from the new part, such as a flashing lightbulb or moving "clacker." The student has complete control over the movement of the parts, and is encouraged to experiment and explore alternate possibilities. With the appeal and interest of an arcade game but the instructional content of a comprehensive lesson in logic, ROCKY'S BOOTS is highly recommended by our staff as an example of excellent educational software. The sound features may be turned off as an instructor option. Age level is 7 and up, and the program is available for the Apple II with 48K and disk.

8L-30AD Rocky's Boots $49.95

IN SEARCH OF THE MOST AMAZING THING

Here is a program with an "alien" motif that is instructive rather than destructive. Students take an amazing journey to a land of friendly aliens, encountering many adventures as they go. They must learn to fly, navigate, and refuel their special flying craft; distance, direction, and time analysis must enter into their decisions. When they meet the aliens, they learn how to talk to them and trade for supplies; communication skills and economic principles are thus discovered. The students learn to reason with the aliens, thereby building problem solving skills. This computer learning game from Spinnaker Software is guaranteed not to "alienate" you from your students! Available on disk for the Apple II and the Atari with 48K, and the IBM PC and Commodore 64 with 64K; age level is 10 to adult. "...has all the makings of the best in computer simulations..."—*ELECTRONIC LEARNING.*

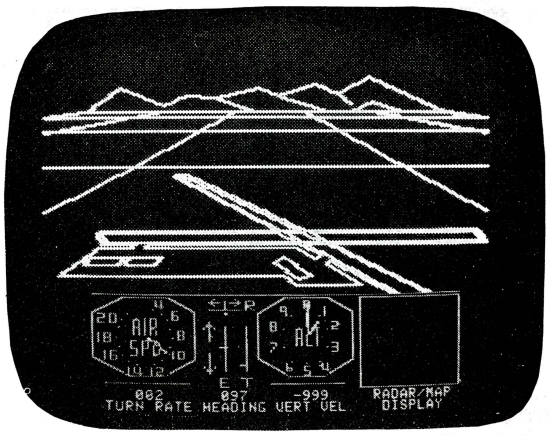
8Q-SS109AD The Most Amazing Thing (Apple) ... $39.95
8Q-SS109BD The Most Amazing Thing (IBM) $39.95
8Q-SS109CD The Most Amazing Thing (C64) $39.95
8Q-SS109RD The Most Amazing Thing (Atari) $39.95

CONGLOMERATES COLLIDE

Venture into the world of finance and fortune with this sophisticated simulation. The struggle begins as you maneuver to acquire growth companies, handle bankers, and deal in world markets. High technology breakthroughs, tariffs, and contract awards are just a few of the factors you will have to work with as you lead your corporation toward becoming the world leader of international finance and trade. Game options include solitaire, 2 to 4 players, or multiple computer opponents. This is the ultimate in educational business simulations! Available for the Apple II with 48K and disk; not Apple IIe compatible.

7T-10AD Conglomerates Collide $39.95

Logic and Simulations



FLIGHT SIMULATOR

A smooth, realistic simulator that gives you a real-time, 3-D, out-of-the-cockpit view. Thanks to the fast animation and accurate representation of flight, the non-pilot can now learn basic flight control, including take-offs and landing. Also includes *British Ace Aerial Battle*, an air combat game. FLIGHT SIMULATOR II features enhanced color graphics and data representing real airports around the country. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 and IBM with 64K; and on cassette for the TRS-80 with 16K.

8C-30C Flight Simulator I (TRS-80, cassette) $25.00
8C-30D Flight Simulator I (TRS-80, disk) $33.50
8C-35D Flight Simulator I (C64) $33.50
8C-40D Flight Simulator I (Apple) $33.50
8C-42D Flight Simulator II (Apple) ..... *New* $49.95
8C-45D Flight Simulator II (IBM) $49.95

CARTELS AND CUTTHROATS

If you have the spirit of an entrepreneur, then CARTELS AND CUTTHROATS is for you. Designed for one to six players, this realistic simulation of the business world will have you making the executive decisions that must be made in a multi-million dollar business. Will you automate your factories now or later? How will you handle the labor situation? How can you boost productivity? You might even form a "cartel" with one or more of the other players and attempt to squeeze out your "competition." Who says you can't start at the top? Available for the Apple II with 48K and disk. "An ideal simulation for education in economics, accounting, and business management."—*COURSEWARE REPORT CARD.*

9E-200AD Cartels and Cutthroats $39.95

PRESIDENT ELECT

This sophisticated simulation allows you to recreate any election from 1960 to 1984, using historical figures or your own data to show "what might have been," or creating a totally new scenario. Up to three participants can run for office, allocating campaign funds and speaking out on issues. The computer determines the prevailing political climate based on the foreign situation, domestic news, and economic factors. It can also play the part of any or all of the three 'party' candidates. A high-resolution graphics map depicts the status of electoral votes at the beginning of each 'week'. When election night arrives, you'll find out if YOU can put someone in the White House! Available for the Apple II with 48K and disk. "...a dynamic approach to learning about the American political system..." — *COURSEWARE REPORT CARD.*

9E-300AD President Elect $39.95

THE KING'S RULE

This challenging and entertaining learning game helps students to form and test hypotheses and build skills in recognizing numerical patterns and relationships. Students work their way into a king's castle by determining the rule that fits a sequence of numbers. They generate and test a working hypothesis of the number sequence by asking questions, trying out new number combinations, and requesting recaps of the data. Six levels of play give students practice in forming and testing increasingly subtle hypotheses. Grade level is 6 and up; available for the Apple II with 48K and disk. A back-up disk and a teacher's guide are included.

8K-1150AD The King's Rule $49.00

ADVENTURE SIMULATIONS

Two simulations to challenge even the most intrepid! *South Pole* takes one or two players back in time to simulate the race between Scott and Amundsen to reach the Pole. Many difficulties and hardships must be overcome and crucial decisions made before the objective is reached. In *Atlantis*, the survival of the island empire is at stake and a course of action must be decided upon; more decisions are required as a result, all of which can affect the kingdom's chances. These programs are designed for the TRS-80 with 16K and cassette; grade level is 4 to 12.

8K-1042TC Adventure Simulations $19.95

THE WHATSIT CORPORATION

Students put on entrepreneurial hats and use mathematics as an analytical tool to weigh variables, plan strategies, and evaluate results in THE WHATSIT CORPORATION. Groups work together to make general start-up decisions, then move on to plan operations for their companies. Competition between groups increases the challenge. Practice in applying number skills to real-life problems is emphasized. Grade level is 6 and up; available on 48K disk for the Apple II and TRS-80. A back-up disk and a teacher's guide with reproducible worksheets, answer key, transparencies, and student activities are included.

8K-1134AD The Whatsit Corporation (Apple) $49.00
8K-1135TD The Whatsit Corporation (TRS-80) $49.00

AIR-TRAFFIC CONTROLLER

This simulation game puts you in control of all the incoming air traffic at a busy airport. You must direct the runway approaches and landings of airplanes and helicopters, monitor circling aircraft, increase and decrease altitudes, and even deal with occasional hijackers and UFO's! You have the radar and the computer — the rest depends on your accuracy and skill. High-resolution graphics are featured; available for the Apple II with 48K and disk, and the IBM PC with 64K and disk.

2C-1050 Air-Traffic Controller (Apple) $19.95
2C-1051 Air-Traffic Controller (IBM) $29.95

ROBOT WAR

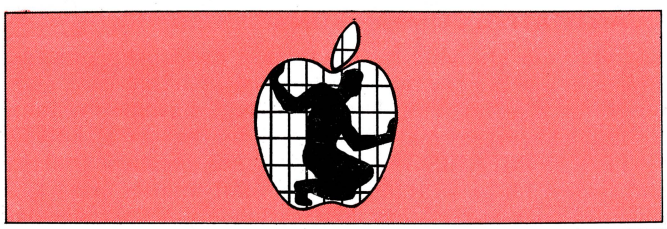
A motivating and enjoyable program that is also an introduction to programming! The student controls a robot that must fight in the arena against other robots, both the computers' and other students'. Students "program" their robots to perform the way they want it to, and this is the heart of the learning experience. A special debugging routine assists the student in programming the robot. This fascinating application of learning-by-doing captures the basics of logical programming (and thinking) in a highly interesting and motivational format. Available for the Apple II with 48K and disk. "...a game that challenges your mind, not your hand-eye coordination."—*PERSONAL SOFTWARE.*

6E-250 Robot War $39.95

OIL RIG

In these energy-conscious times, this simulation program is sure to be a hit. OIL RIG engages students in a search for oil and natural gas, using seismic data to map underground rock layers and identify oil traps. The "drilling" operation allows students to test their seismic work and see if they strike "black gold." A geologic history and black line masters are included in the teacher's guide. Available for the Apple with 48K and disk, and the Pet with 16K and cassette; grade level is 7 to 12.

6B-ASC4 Oil Rig (Apple) $29.95
6B-PSC4 Oil Rig (Pet) $29.95



THE PRISONER

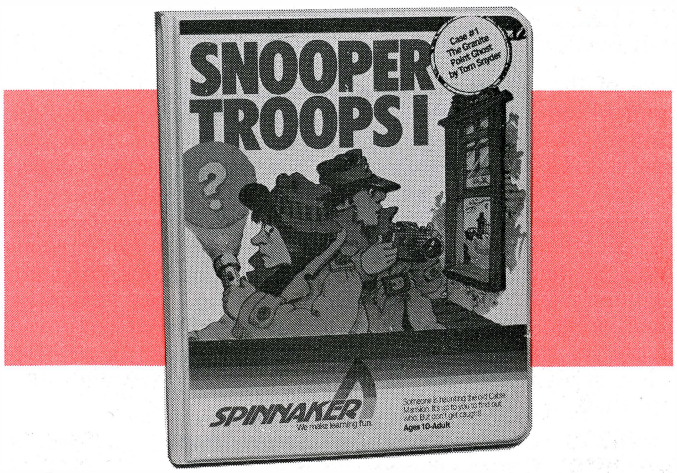
A classic simulation requiring logical thinking and reasoning power. Based on the highly-acclaimed television series, THE PRISONER puts you in a nightmarish world whose rulers are determined to break you down and get to the information you are holding. You are armed only with your intelligence, your sense of individuality, and your wits. Abstract clues must be assembled into a logical pattern to enable you to escape "the village" to freedom. Features unique high-resolution graphics and sound effects. Available for the Apple II and Atari with 48K and disk.

3L-M50 The Prisoner (Apple) $32.95
3L-M55 The Prisoner (Atari) $39.95

ISAAC NEWTON

A fascinating and valuable educational game/simulation, ISAAC NEWTON challenges the players to assemble evidence of the world around them and discern the underlying "Laws of Nature" that have produced this evidence. An inductive game that allows students to actively participate by proposing experiments to determine if new data conform to the "Laws" in question. Includes a complete instruction manual and a choice of difficulty levels. A highly motivational program for senior high level students. Available for the Apple II and TRS-80 with 48K and disk. ". . . has great educational potential for young people who are involved in learning how to think and solve problems." — *PEELINGS.*

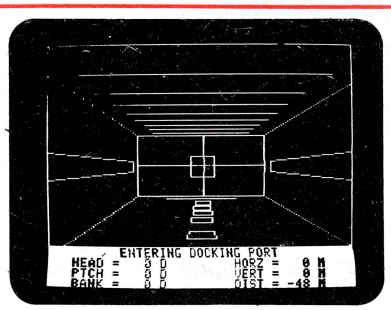
5H-720AD Isaac Newton (Apple) $55.95
5H-720TD Isaac Newton (TRS-80) $55.95



SNOOPER TROOPS

SNOOPER TROOPS is a series of unique interactive logic mysteries, with students playing the part of detectives. To solve the big crime, each detective must drive around town, question suspects and witnesses, search dark houses, and talk with secret agents. In the process, the student is learning organization and reasoning skills, efficient record-keeping, mapmaking, and is building vocabulary. SNOOPER TROOPS #1, *The Granite Point Ghost,* is an investigation into why mysterious things are happening at an old mansion; SNOOPER TROOPS #2, *The Disappearing Dolphin,* involves the strange disappearance of Lily the Dolphin from the Aquarium. Excellent high resolution graphics and true interaction with the computer are featured. Available on disk for the Apple II and the Atari with 48K, and the IBM and Commodore 64 with 64K. Age level is 10 to adult.

8Q-101AD Snooper Troops #1 (Apple) $44.95
8Q-101BD Snooper Troops #1 (IBM) $44.95
8Q-101CD Snooper Troops #1 (C64) $44.95
8Q-101RD Snooper Troops #1 (Atari) $44.95
8Q-102AD Snooper Troops #2 (Apple) $44.95
8Q-102BD Snooper Troops #2 (IBM) $44.95
8Q-102CD Snooper Troops #2 (C64) $44.95
8Q-102RD Snooper Troops #2 (Atari) $44.95



RENDEZVOUS

A fascinating simulation of the Space Shuttle, developed by a senior NASA scientist. In four phases RENDEZVOUS simulates an actual Space Shuttle flight from Earth lift-off, through orbital rendezvous, approach, alignment and docking with a space station. Three-dimensional graphics bring to life the solidity of the space station and docking bay, visible through the shuttle's 'window.' High-resolution graphics and animation capture the drama and difficulty of space navigation. Suitable for age levels 13 and up; available on 48K disk for the Apple II and Atari. ". . . combination of a great video game with a terrific learning experience." — *ELECTRONIC LEARNING.*

6H-217912 Rendezvous (Apple) $39.95
6H-217915 Rendezvous (Atari) $39.95

SAT/Test Preparation

COLLEGE BOARD SAT PREPARATION SERIES

One of the best methods available for sharpening skills in preparation for the SAT exams. Each program presents the student with a series of questions derived from the analysis of past exams and present testing materials. Answers are provided for all questions, and for the instructor detailed explanations and solutions are furnished. Includes 25 programs covering *Vocabulary, Reading Comprehension, Sentence Completion, Word Relationships, Algebra, Geometry, Arithmetic, Problem Solving,* and *Quantity Comparison.* Independent tests have confirmed improved scores for students utilizing this series. A must for all high schools! Available for the Apple II and TRS-80 with 48K and disk.

5H-700AD College Board SAT Series (Apple) $325.00
5H-700TD College Board SAT Series (TRS-80) ...$325.00

THE VERBAL SAT MASTER NEW

This self-teaching program prepares students for the College Board SAT by helping them improve their verbal reasoning and test taking skills. A thorough explanation is provided after each question is answered. The *Diagnostic Section* analyzes the student's verbal reasoning abilities within each skill area, and provides a projected SAT test score. The *Prescriptive Section* provides practice tests and exercises for analogies, antonyms, sentence completion, and reading comprehension. Guessing, time factors, question formats, test pitfalls, and a review of SAT test taking procedures are covered. After each practice session the student receives a computer generated evaluation based on performance. Available for the Apple II with 48K and disk.

7F-500AD The Verbal SAT Master $74.95

BARRON'S COMPUTER SAT STUDY PROGRAM NEW

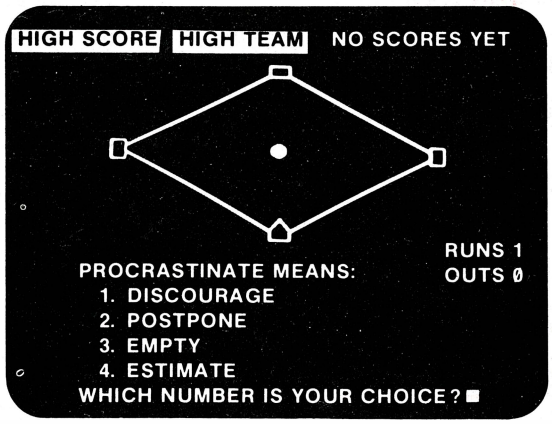
This unit combines computer software with Barron's well-known SAT study guides to give your students an advantage on the Scholastic Aptitude Test. The computer provides instant feedback, evaluating student performance based on model exams. The program can prescribe an SAT study plan based on individual needs. It's almost like providing a private tutor! Includes three disks, Barron's 706 page text "How to Prepare for College Entrance Examinations", a 304 page Math Workbook, a 144 page Verbal Workbook, and a User's Manual. Available for the Apple II with 48K and the Commodore 64 with 64K.

4S-7160AD Barron's Computer SAT (Apple) $79.95
4S-7192CD Barron's Computer SAT (C64) $79.95

PSAT/SAT WORD ATTACK SKILLS

These two programs prepare students specifically for the 'antonyms' portion of the Scholastic Achievement Tests. Vocabulary words, carefully selected for their frequent appearance on tests, are grouped into lessons; each word is reviewed through definitions, sample sentences, component analysis, and test questions. A timed mastery test then prepares students for the real exam. Each set contains two disks for the Apple II with 48K. "... has all the hallmarks of superior educational programs." — *COURSEWARE REPORT CARD.*

3L-M110 PSAT Word Attack Skills $49.00
3L-M115 SAT Word Attack Skills $49.00



VOCABULARY BASEBALL

This unique program designed for high school students makes it fun to improve one's vocabulary. Using the format of a baseball game the player tries to outscore previous players and get his name recorded in the Hall of Fame. The three highest previous scores are continually displayed until a new player does better. Available for the Apple II with 48K and disk.

5A-CL700AD Vocabulary Baseball $29.95

QUANTITATIVE COMPARISONS

Prepare your students for the type of math problems that appear on the Scholastic Aptitude Test with this set of eight programs. Starting with elementary concepts and continuing through most of the material covered by the test, QUANTITATIVE COMPARISONS also provides excellent practice and review for general high school mathematics classes. A final test with explanatory information is given at the end of each program. Available on disk for the Apple II with 48K and the Atari with 32K and a joystick.

7B-185AD Quantitative Comparisons (Apple) $27.95
7B-185RD Quantitative Comparisons (Atari) $27.95

ENGLISH ACHIEVEMENT TEST

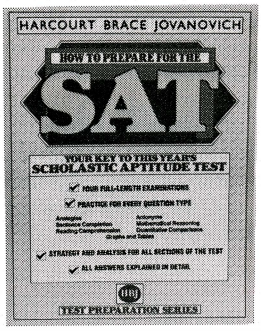
A set of five comprehensive programs that provide practice for the CEEB English Composition Test. Each program will present 16 randomly selected sentences or problems similar in format to those given on the CEEB Test. *Unit 1* covers sentences in which one underlined part may be an error, and must be identified; *Unit 2* requires the student to label errors such as diction, wordiness, grammar, or mixed metaphor; *Unit 3* covers substitution with sentence variations; *Unit 4* involves labelling errors in agreement, comparison, or punctuation; and *Unit 5* covers sentence editing. As these programs are designed for preparatory study, the student is shown the answer and it is analyzed after each question; positive reinforcement is provided. This series is the ideal study aid for the CEEB English Test. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the IBM PC and Commodore 64 with 64K; and on cassette for the Pet with 16K. "... a comprehensive package that should prove an excellent tool for group instruction and individual student review." — *ELECTRONIC LEARNING.*

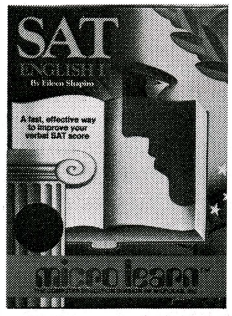
6V-100AD English Achievement Test (Apple) $175.00
6V-100BD English Achievement Test (IBM) $175.00
6V-100CD English Achievement Test (C64) $125.00
6V-100PC English Achievement Test (Pet) $100.00
6V-100TD English Achievement Test (TRS-80) $175.00

COMPUTER SAT

This program from Harcourt Brace Jovanovich introduces students to the SAT exam. Sample material developed from previous tests is practiced at an individual pace with immediate feedback and tutorial explanations for incorrect answers. The scoring routines highlight student performance in both text and bar graph form and show equivalent College Board scores, including the time factor involved for completion of each section. In addition to the software and extensive user's manual, a copy of HBJ's 470 page textbook "How to Prepare for the SAT" is also included. Available on disk for the Apple II, TRS-80, and Atari with 48K; and the IBM PC and Commodore 64 with 64K.

4L-100AD Computer SAT (Apple) $79.95
4L-100BD Computer SAT (IBM) $79.95
4L-100CD Computer SAT (C64) $79.95
4L-100TD Computer SAT (TRS-80) $79.95
4L-100RD Computer SAT (Atari) $79.95





ENGLISH SAT

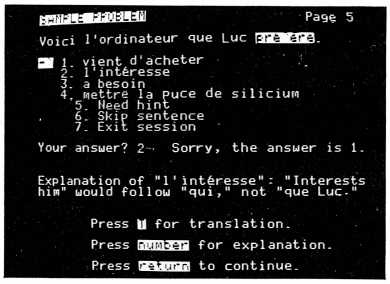
This program provides aid to students taking the verbal section of the Scholastic Aptitude Test for college entrance. By providing explanations of all the answer choices for the 160 questions, the program helps students learn the reasoning behind each choice; learning rate increases dramatically with this technique. Included are analogies, antonyms, sentence completions, and English grammar. Available on disk for the Apple II with 48K and the Commodore 64 with 64K.

6R-200AD English SAT (Apple) $29.95
6R-200CD English SAT (C64) $29.95

LEARNING IMPROVEMENT SERIES

Here is a series of programs that shows students how to make the most of their study time and achieve better test scores. *Effective Study Skills* determines each student's ideal learning method and offers an instructional presentation for these particular needs. *Following Written Directions* shows the consequences if directions are not followed precisely. Multiple-steps are emphasized to simulate real-life conditions. *Improving Your Memory* presents a variety of specific methods based on proven instructional methods. *Strategies for Test Taking* teaches students how to be "test-wise" and to master the techniques for true or false, multiple choice, fill-in-the-blank, short answer, and essay. Students practice their skills by taking the various types of test formats. Each program can be individualized to the student's reading/conceptual level. Level is junior high and up; includes a special education level. Available for the Apple II with 48K and disk.

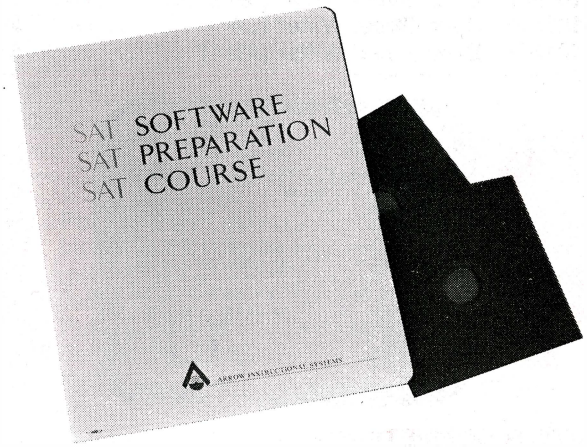
4V-201AD Effective Study Skills $44.95
4V-202AD Improving Your Memory $44.95
4V-203AD Following Written Directions $44.95
4V-204AD Strategies for Test Taking $44.95
4V-200AD Learning Improvement Series (set of 4) $165.00


SAMPLE PROBLEM
Page 5
Voici l'ordinateur que Luc ère ère.
1. vient d'acheter
2. l'intéresse
3. a besoin
4. mettre la puce de silicium
5. Need hint
6. Skip sentence
7. Exit session
Your answer? 2→ Sorry, the answer is 1.
Explanation of "l'intéresse": "Interests him" would follow "qui," not "que Luc."
Press H for translation.
Press number for explanation.
Press return to continue.

FRENCH AND SPANISH ACHIEVEMENT TEST

These comprehensive programs provide practice for the CEEB French or Spanish Achievement Test. The problems consist of statements within which portions have been omitted. From the four choices that follow, the student must select the one that makes the statement grammatically correct. Upon conclusion of each exercise, a full analysis of the student's answers is presented which includes a list of the words missed and their English meanings. Other program features are full French or Spanish character sets; the ability to skip a problem and return to it later; and an option to have problems presented randomly or sequentially. FRENCH ACHIEVEMENT II and SPANISH ACHIEVEMENT II also give the option of selecting categories such as pronoun usage, verbal idioms, subjunctives, etc. Full translations of the original problems, a hint option, and a review option are also included. Available for the Apple II with 48K and disk; high school level.

6V-201AD French Achievement I $49.95
6V-210AD French Achievement II $49.95
6V-202AD Spanish Achievement I $49.95
6V-211AD Spanish Achievement II $49.95



SAT PREPARATION PROGRAM

This comprehensive program can be the gateway to higher scores on the SAT examination for your students. A virtually unlimited combination of verbal and math questions are available, allowing concentration on specific topics or presentation of a complete, simulated test. In areas where the student requires further study, the program will access "Tutormode", a skill building section that gives a step-by-step analysis of how a correct answer is arrived at and why the others are incorrect. Illustrative graphics highlight the material; built-in timing and scoring functions convert results automatically to equivalent College Board scores. The set contains five diskettes and a user's manual, and is available on 48K disk for the Apple II and the TRS-80. Give your students the test-taking skills and confidence they need for the SAT with this excellent program.

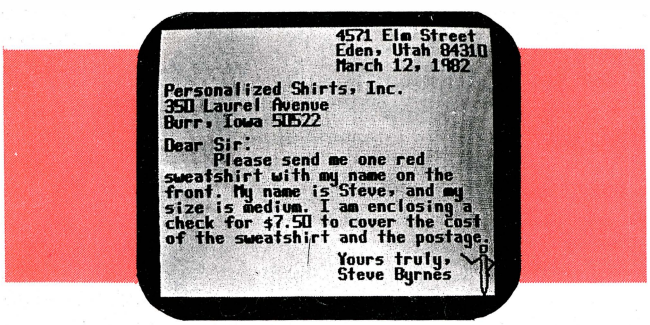
4J-300AD SAT Preparation Program (Apple) $199.95
4J-300TD SAT Preparation Program (TRS-80) $199.95

Reading and Language Arts

BANK STREET WRITER

The BANK STREET WRITER is a word-processing program designed for the classroom! It lets you open up a new world of writing for your students, allowing them to create and edit stories, reports, or other written material quickly and easily. Moving phrases and words around the screen allows students the opportunity to fully explore their creativity. No longer must they recopy their entire composition by hand; they have complete flexibility to rewrite their work on the computer screen, and then have it come off the printer looking professionally typed! The BANK STREET WRITER contains many of the features you'd expect to find in expensive business systems, including text movement, search and replace, automatic centering, and much more. A complete set of tutorial and utility programs is included, as are a comprehensive reference manual and a back-up disk. Available on disk for the Apple II and Atari 800 with 48K, and the IBM and Commodore 64 with 64K. "...a simple to learn, remarkably well-documented little gem of a program..."—*INFOWORLD.*

4F-101AD Bank Street Writer (Apple) $69.95
4F-101BD Bank Street Writer (IBM) .....*New* $79.95
4F-101CD Bank Street Writer (C64) .....*New* $69.95
4F-101RD Bank Street Writer (Atari) $69.95


4571 Elm Street
Eden, Utah 84310
March 12, 1982
Personalized Shirts, Inc.
350 Laurel Avenue
Burr, Iowa 50622
Dear Sir:
Please send me one red sweatshirt with my name on the front. My name is Steve, and my size is medium. I am enclosing a check for $7.50 to cover the cost of the sweatshirt and the postage.
Yours truly,
Steve Byrnes

WRITING COMPETENCY PROGRAM

This highly-motivating program is designed to instruct students in three basic and essential areas of writing skills: letter writing, report organization, and persuasion. The specific skills covered include formats, punctuation, tone, content, coherence, arguments, facts, supporting details, and more. Designed as a complete tutorial course, the program includes graphics reinforcement and a complete management system that allows the teacher to monitor student achievement. Also provided is a set of support materials, consisting of over 100 ditto masters that allow for supplementary practice and follow-up of the writing techniques covered in the program. Available for the Apple II and TRS-80 with 48K and disk (back-ups included), and for the TRS-80 and the Pet with 16K and cassette.

3K-190AD Writing Competency (Apple) $115.00
3K-190PC Writing Competency (Pet) $105.00
3K-190TC Writing Competency (TRS, cassette) .. $105.00
3K-190TD Writing Competency (TRS, disk) $115.00

MASTERING PARTS OF SPEECH NEW

The ten programs in this series provide individualized diagnostic and remedial aid for students needing assistance in grammar. *Nouns, Verbs, Pronouns, Adjectives, Adverbs, Prepositions,* and *Conjunctions* test student proficiency in identifying parts of speech and give tutorial help as needed. *Interjections* demonstrates how a word can be used as more than one part of speech. *Instruction* explains to students how to enter their responses in the program, and *Create Test* allows the teacher to generate and print worksheets and tests. Grade level is 7 and up; available for the Apple II with 32K and disk. A back-up, a teacher's guide, and record sheets for charting student progress are included.

8K-018AD Mastering Parts of Speech $39.00

OUTLINING SKILLS NEW

Learning how to arrange information in an outline format is an important skill. This program provides exercises to develop this skill and help prepare students for taking notes and recording essential facts. Among the topics covered are grouping and naming items that are related, arranging items in a specific order, identifying main topics, recognizing items of the same type, writing outline entries, and arranging entries in outline form. Over 70 exercises are provided, which can be modified by the instructor. Record-keeping and print-out capabilities are included. Grade level is 4 and up; available for the Apple II with 48K and disk.

6M-4151 Outlining Skills $39.95

THE SPEED READER

THE SPEED READER was designed by professionals and tested on hundreds of students. The program provides total reading improvement by focusing on breaking poor reading habits and replacing them with good ones. Through a series of step-by-step lessons, students can improve concentration, increase attention span, sharpen perception, and strengthen eye movements. Both column and paragraph reading selections are provided. Available on disk for the Apple II with 48K; and the IBM PC and Commodore 64 with 64K. Create more efficient, effective, and productive readers with THE SPEED READER!

4D-DA3AD Speed Reader (Apple) $69.95
4D-DA3BD Speed Reader (IBM) $69.95
4D-DA3CD Speed Reader (C64) $69.95

PHRASES AND CLAUSES

This program is comprised of a series of graded questions covering the classification of phrases and clauses, adjectival and adverbial usage, and parts of speech. Includes high-resolution graphics and animation, as well as complete student monitoring. 10th grade reading level; available for the Apple II with 48K and disk.

2C-2110 Phrases and Clauses $29.95

STEPS TO ADVANCED READING

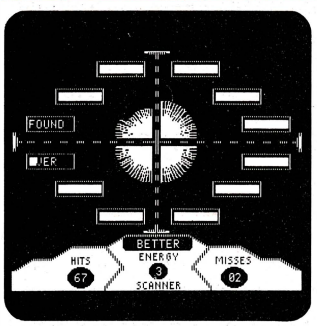
This series assists students to increase their reading speed up to 2½ times while maintaining 100% comprehension. Twenty lessons are provided, which the students move through at their own pace. Features include proportional spacing, upper and lower case letters, highlighted lines, user controlled rate of presentation, and a "ghosted" image that will display only the paragraph line to be read while obscuring the other lines. The complete package contains four disks, two reading tests, a student workbook, and a reading improvement book. Available for the Apple II with 48K and disk; high school level.

4E-8501 Steps to Advanced Reading $99.00

LANGUAGE/READING DEVELOPMENT PROGRAM

A comprehensive and easy to use system for basic language arts instruction, suitable for elementary and junior high school grades as well as remedial senior high school. Programs are included for the development of vocabulary and word recognition, expansion of grammar skills, promotion of spelling skills, reading speed development, improvement of concentration and response habits, and the usage of these skills in solving analogies and understanding everyday reading material. The entire package is menu-driven, with controlled readability, diagnostic reporting, time controlled displays, complete error recovery, printer options, supplemental user file capability, reinforcement options, and more. All student responses require complete, accurate answers, not multiple choice selections. A 150 page loose-leaf manual containing worksheets, study guides, and word lists is included. A completely flexible system suitable for any basic language instruction. Available for the Apple II with 48K and disk.

8H-450 Language/Reading Development $175.00



ARCADEMIC SKILL BUILDERS IN LANGUAGE ARTS

This series of six packages, containing both software and print materials, incorporates exciting arcade games with practice in basic language arts topics. Each program features an easy-to-run game with fast action, colorful graphics, and selectable levels of difficulty. *Verb Viper* covers subject and verb agreements; *Word Man* deals with word building through patterns; *Word Invasion* works with the recognition of six parts of speech; *Spelling Wiz* drills on spelling demons; *Word Radar* practices sight word recognition; and *Word Master* covers antonyms, synonyms, and homonyms. Each game includes a teacher's manual, an instruction sheet, progress sheets, and 12 duplicating masters. Available for the Apple II with 48K and disk; grade level is intermediate and up. "...quick, imaginative, and as alluring as any video game."—*ELECTRONIC LEARNING.*

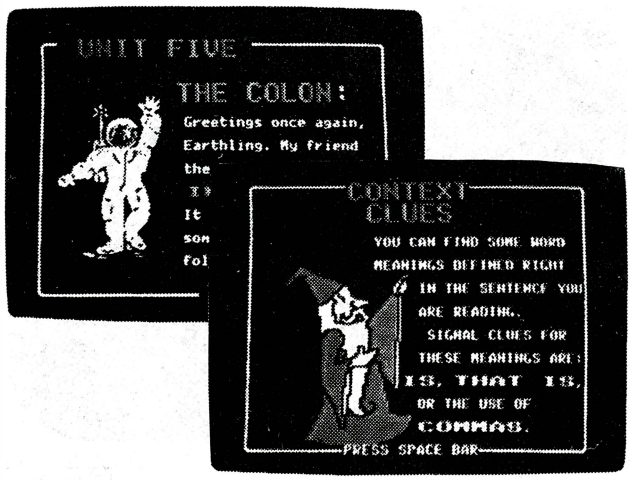
3Y-2100 Verb Viper $44.00
3Y-2200 Word Man $44.00
3Y-2300 Word Invasion $44.00
3Y-2400 Spelling Wiz $44.00
3Y-2500 Word Radar $44.00
3Y-2600 Word Master $44.00

ANALOGIES

64

This set of six programs teaches the common types of analogies and provides methods for analyzing them. Practice exercises and a mastery test are included. Available on disk for the Apple II and the Atari with 32K, and on the Commodore 64 with 64K. "It is essential for students at all levels to have the experience of a program like ANALOGIES."—*COURSEWARE REPORT CARD.*

7B-125AD Analogies (Apple) $26.95
7B-125CD Analogies (C64) $26.95
7B-125RD Analogies (Atari) $26.95



LANGUAGE CONCEPTS

These comprehensive programs feature unique contemporary graphics, and students are motivated to zero in on the precise areas where they need work. Each program features three instructional modes: Statement of Rule, wherein the rules for each skill are broken down into smaller, more specific sub-rules, presented with usage examples and helpful hints; Practice Mode, in which students must determine the correct usage for specific examples; and the Review/Game mode, which is a cumulative review giving students feedback as they practice and reinforce their understanding. Skill mastery will present the student with an opportunity to play a short game at the conclusion of the lesson. A complete management system holding up to 120 student records is included, with optional automatic advancement of students to the next skill level. Student records can be viewed at any time. The units contain reproducible activity sheets keyed to each skill and a teacher's guide. Each program is available for the Apple II with 48K and disk; grade level is 6-8. "...a highly effective means of individualized teaching and testing of word-building skills." — *COURSEWARE REPORT CARD.*

6T-7879 Punctuation Skills: Commas $49.95
Includes introductory elements, items in a series, interrupting elements, independent clauses, dates, addresses, and titles.

6T-7880 Punctuation Skills: End Marks, Semicolon, Colon $49.95
Includes period, question mark, exclamation point, semicolon, and colon.

6T-7881 Vocabulary Skills: Context Clues $49.95
Includes development of vocabulary through context, definition, contrast, educated guesses, and examples.

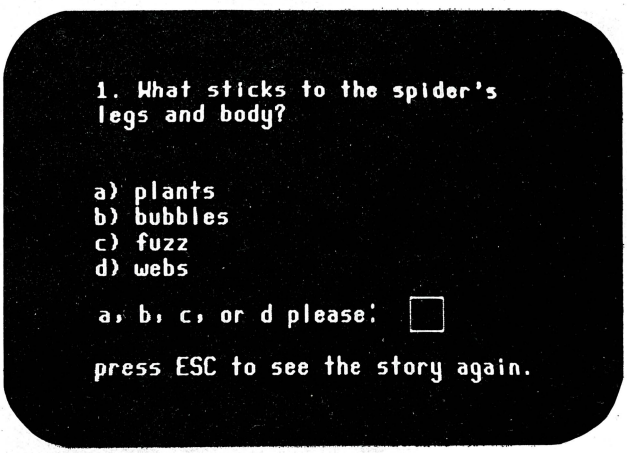
6T-7882 Vocabulary Skills: Prefixes, Suffixes, Root Words $49.95
Includes introductory concepts, prefix tutor, suffix tutor, root word tutor, and word building.

6T-7892 Combining Sentence Parts $49.95
Includes recognizing sentence parts, compounding subjects, predicates, and complements.

6T-7893 Compound and Complex Sentences $49.95
Includes readiness skills, combining sentences into compound and complex sentences, adverb clauses, and adjective clauses.

6T-7894 Reading Comprehension $49.95
Includes recognizing topic sentences, listing supporting details, summarizing main ideas, choosing titles, and evaluating details.

6T-7860 Language Concepts Series (set of seven above) $339.95



DIASCRIPTIVE READING

DIASCRIPTIVE READING is a prescriptive, tutorial reading series that offers unparalleled flexibility in assessing student reading capabilities. Six skill areas are covered, including *Main Idea, Details, Fact/Opinion, Vocabulary, Sequence,* and *Inference.* A developmental reading program and diagnostic tests for each grade level and skill area evaluate the reading abilities of individual students and prescribe what is needed for improvement. All lessons are self-directing and self-correcting, and focus on one reading skill at each level; advanced graphics animation is utilized for positive reinforcement of the material. The difficulty levels in the series were determined from student results on SAT and CTBS programs. The DIASCRIPTIVE READING series is the ideal supplement to today's language arts curriculum! Available on disk for the Apple II with 48K and the TRS-80 with 32K; and on cassette for the Pet with 8K and the TRS-80 with 16K. The cassette versions include 15 tapes, and the disk versions 7 diskettes with back-ups. The grade level is 3 to 8.

3K-160AD Diascriptive Reading (Apple) $365.00
3K-160PC Diascriptive Reading (Pet) $295.00
3K-160TC Diascriptive Reading (TRS, cassette) ..$295.00
3K-160TD Diascriptive Reading (TRS, disk) $365.00

WORDY: COMMON FORMS OF WORDINESS

Easy to understand and fun to use, WORDY is designed to make your students aware of the common forms of wordiness and help them develop a more concise writing style. Among the topics covered are circumlocutions, redundancy, "it is" constructions, weakening intensifiers, vague expressions, pretentious diction, and elaborate constructions. Imaginative graphics and animation illustrate the concepts in this high school level program. Help your students learn how to use only those words necessary for clear understanding with WORDY! Available for the Apple with 48K and disk.

2V-C50 Wordy $100.00

SENTENCE DIAGRAMMING AND OTHER GRAMMAR SKILLS

A comprehensive disk which includes questions on eight parts of speech (noun, pronoun, etc.); matching problems involving 27 different word usages (conjunctions, possessives, predicates, etc.); and sentence diagramming utilizing direct student interaction. Includes complete documentation and record-keeping of student scores for the instructor. Grade level is 6 and up; available for the Apple II with 48K and disk. "It interacts with the students in a dynamic, meaningful way." — *THE COMPUTING TEACHER.*

2C-2100 Sentence Diagramming $24.95

VIDEO SPEED-READING TRAINER

Now students can increase their reading speed and comprehension with the VIDEO SPEED-READING TRAINER package. This program will take students step-by-step through a systematic training procedure, starting at whatever level of competency is appropriate. The computer will automatically advance the lessons as reading speed and comprehension increase. Available for the TRS-80 with 16K and cassette.

4P-0100R Video Speed-Reading Trainer $14.95

TUTORCOURSE MECHANICS OF ENGLISH SERIES

Included in this comprehensive series are two complete courseware systems covering language arts instruction and the mechanics of English. Both TUTORCOURSEs were designed by the California Testing Bureau as complete stand-alone Language Arts packages, featuring primary instruction with multiple choice questions, remedial branching to subprograms, criterion referenced computer-managed tests, and a complete management system for keeping track of student performance. This sophisticated system can interpret when a student needs only simple remediation, requires more extensive review, or when the student's knowledge is already beyond that of the material being presented, and will branch to the appropriate section of the lesson. Complete individualization of instruction is thus provided for both the slow learner and the faster student; such a system of advanced branching is unique to the TUTORCOURSE series of programs. Printed diagnostic/prescriptive pre-and post-tests with user reproduction rights are included, as well as extensive documentation containing lesson outlines and course suggestions. Each complete TUTORCOURSE requires from eight to sixteen hours for completion of the entire set of lessons; a complete sequence of instruction is thus provided for each topic, reinforcing and expanding upon the material presented by the classroom teacher. Available for the Apple II with 48K and disk.

TUTORCOURSE MECHANICS OF ENGLISH 1

MECHANICS OF ENGLISH 1 contains 18 disks, covering subject-predicate construction; complete subjects; simple and compound subjects; noun and pronoun subjects; verbs; predicates; helping verbs; declarative, interrogative, exclamatory, and imperative sentences; subject-verb agreement; regular and irregular verbs; adjectives; articles; comparison; adverbs and prepositions; pronouns; nominative, objective, and possessive case; capitalization of first words in a sentence, place names, languages, and proper names; contractions of the pronoun; end punctuation; punctuation of abbreviations, quotations, and titles; use of commas, and the use of the apostrophe.

2P-92 Mechanics of English 1 .....$918.00

TUTORCOURSE MECHANICS OF ENGLISH 2

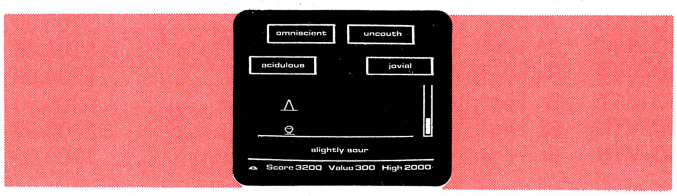
MECHANICS OF ENGLISH 2 contains 23 disks, covering sentence construction; subjects, verbs, and modifiers; prepositions; direct objects; objects of a preposition; forms of be; subject-linking verb-complement pattern; adjectives and adverbs; adjectival and adverbial phrases; active and passive verbs; noun and adjective complements; regular verb tense; irregular verbs; passive and progressive verb construction; participles and gerunds; singular and plural forms of verbs; pronouns; nominative and objective case; possessives; capitalization rules; and punctuation rules.

2P-93 Mechanics of English 2 .....$1173.00

WHOLE BRAIN SPELLING

WHOLE BRAIN SPELLING combines sound learning techniques with solid programming experience to provide a tutorial package of high quality and versatility. It contains over 2000 words in 200 lists for age levels 9 through adult, and is designed to develop internal visualization skills for spelling improvement. Very user-friendly, the program allows the student to move to any lesson section as desired, choose word lists to study, and proceed at an individual pace. Lesson instructions are always available at the touch of a key. Uses upper and lower case letters; the incorrect letters in misspelled words are high-lighted in color for added emphasis. A superb educator-designed package. Available for the Apple II with 48K and disk.

8C-60D Whole Brain Spelling $34.95



WORD ATTACK

Making learning fun is the object of this vocabulary package for the Apple, IBM, and Commodore 64 computers. Over 675 words with definitions and sentences illustrating usage are included in four exciting activity programs, with a follow-up learning game featuring arcade action. Included in the program is an editor routine that allows the instructor to enter additional word lists for all of the activity programs. Extensive classroom testing has proven WORD ATTACK to be highly effective in improving vocabulary skills. Available on disk for the Apple II with 48K, and the IBM and Commodore 64 with 64K; age level is 8 to adult.

4D-DA2AD Word Attack (Apple) $49.95
4D-DA2BD Word Attack (IBM) $49.95
4D-DA2CD Word Attack (C64) $49.95

WORD SCRAMBLER & SPELLING TUTOR

A combination spelling and word-scrambling game that features comprehensive scoring, practice of misspelled words, and optional user-input of word lists. Three separate word files are programmed on the disk, for grade levels K-3, 4-8, and 9-College. An excellent program for spelling reinforcement. Available on 48K disk for the Apple II and the Atari.

2C-1800 Word Scrambler (Apple) $19.95
2C-1803 Word Scrambler (Atari) $19.95

VOCABULARY BUILDERS

These two sets each contain eleven programs with graded vocabulary questions on synonyms and antonyms, the most common type of questions featured on IQ tests. Over 400 questions covering 2000 words are included with each program, with VOCABULARY BUILDER 2 utilizing a more advanced word list. Available on disk for the Apple II and the Atari with 32K, and the Commodore 64 with 64K; grade level is junior to senior high.

7B-115AD Vocabulary Builder 1 (Apple) $26.95
7B-115CD Vocabulary Builder 1 (C64) $26.95
7B-115RD Vocabulary Builder 1 (Atari) $26.95
7B-120AD Vocabulary Builder 2 (Apple) $26.95
7B-120CD Vocabulary Builder 2 (C64) $26.95
7B-120RD Vocabulary Builder 2 (Atari) $26.95

COMPU-SPELL

COMPU-SPELL is a spelling practice program designed for use with one or more of the grade-level disks, or by itself with the instructor designating the words to be used. The system features individual student file management, upper and lower case text, and positive reinforcement of correct answers. Each grade-level disk contains 800-1200 words and requires the use of the system disk. Using a blank initialized disk and the system disk the teacher may designate an unlimited number of spelling words. Available for the Apple II with 48K and disk.

3L-M90 Compu-Spell System Management Disk (Required) $29.95
3L-M91 Compu-Spell Grade 4 Disk $19.95
3L-M92 Compu-Spell Grade 5 Disk $19.95
3L-M93 Compu-Spell Grade 6 Disk $19.95
3L-M94 Compu-Spell Grade 7 Disk $19.95
3L-M95 Compu-Spell Grade 8 Disk $19.95

SPELLING BUILDER

This package contains eight programs and an audio cassette that teach important spelling rules and skills. Not just a spelling drill, this course teaches a method for approaching difficult words; it is ideal for the student who has mastered basic spelling but has trouble deciding if it's *supersede* or *supercede*, *combustable* or *combustible*, etc. A final post test is included; grade level is junior high and up. Available for the Apple II and the Atari with 32K and disk and the Atari with 16K and cassette.

7B-105AD Spelling Builder (Apple) $26.95
7B-105RC Spelling Builder (Atari, cassette) $19.95
7B-105RD Spelling Builder (Atari, disk) $26.95

SPECIAL LEARNING SPELLING

This series is designed to meet the special needs of students with specific language learning disabilities or spelling deficits. The main subjects covered are spelling rules and exceptions: individualized repetitive exercises and positive reinforcement are emphasized to help motivate student interest and understanding. Tutorials are provided for each spelling rule. Developed by a language therapist, this series is ideally suited to any special education language curriculum. Available on disk for the Apple II with 48K and the Commodore 64 with 64K: and on cassette for the Pet with 16K.

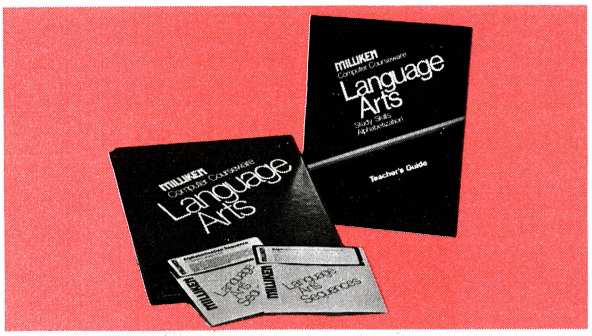
8E-100AD Special Learning Spelling (Apple) $230.00
8E-100CD Special Learning Spelling (C64) $199.95
8E-100PC Special Learning Spelling (Pet) $199.95

SPELLING FOR THE PHYSICALLY IMPAIRED

This program, developed by MECC, is an innovative, one-touch system that enables students with motor impairment or poor coordination to do independent work. Twenty spelling drills are available, with key words missing and multiple choice answers displayed for the student to select. The instructor can add, change, or delete words and sentences in the drills to tailor the program to students' specific requirements. A comprehensive teacher's guide is included, which contains a complete program description, background information, tips for classroom use and follow-up activities, illustrations of sample runs, and print-outs of each drill. Available for the Apple II with 32K and disk; a back-up disk is included.

8K-017AD Spelling for the Physically Impaired $39.00

Spelling and Vocabulary Skills



CLOZE PLUS

The CLOZE PLUS program from Milliken Courseware develops comprehension skills and vocabulary through structured cloze and context analysis for reading levels six through eight. There are 20 lessons for each level, which consist of short, seven to ten paragraph reading selections with cloze and word-meaning exercises. Clues and immediate feedback are provided, according to the student's performance. Three kinds of exercises are included: meaning completion cloze, syntax completion cloze, and vocabulary in context. Among the skills developed through these exercises are interpretation and association; identifying pronoun antecedents; and noting similarities and differences. A comprehensive management system is included that allows the teacher to maintain individual records for up to 100 students in as many as five classes; identify problem areas; make print-outs of student performance; and more. CLOZE PLUS is available for the Apple II with 48K and disk; the reading level is 6 through 8. The set contains 12 disks, teacher information sheets, and a teacher's guide in a three-ring binder.

ML-2000 Cloze Plus $425.00

VOCABULARY BUILDERS

In VOCABULARY BUILDERS, the computer guides students through various activities to expand skills in analyzing and understanding word meanings. Homonyms, synonyms, antonyms, and context clues are just some of the areas covered. Continuous student involvement insures a high level of reinforcement; review questions and vocabulary games are included. Available for the Apple II and Atari with 32K and disk; and the TRS-80 and Pet with 16K and cassette.

6A-1600A Vocabulary Builders (Apple) $67.00
6A-1600P Vocabulary Builders (Pet) $56.00
6A-1600T Vocabulary Builders (TRS-80) $56.00
6A-1600R Vocabulary Builders (Atari) $67.00

VOCABULARY SERIES

This series consists of 72 lessons dealing with words commonly found in daily newspapers and weekly news magazines. Each problem presents a definition and sample sentence; the student then chooses the vocabulary word that best fits. At the end of each lesson, the student's results are summarized and a list of specific words that gave trouble during the exercise are presented. Grade level is elementary through high school. Available on 32K disk for the Apple II, Atari, and TRS-80; on 64K disk for the Commodore 64; and on 8K cassette for the Pet.

6B-V2A Vocabulary Series (Apple) $168.00
6B-V2C Vocabulary Series (C64) $168.00
6B-VO2 Vocabulary Series (Pet) $168.00
6B-V2R Vocabulary Series (Atari) $168.00
6B-V2T Vocabulary Series (TRS-80) $168.00

VOCABULARY PROGRAMS

Each of the vocabulary programs in this series contains words appropriately rated for a particular grade level. The computer will select eight words and ask the student to choose the correct definition. If the student responds incorrectly, the computer will show the word in a sentence, and the student will try again using this contextual clue. Each program contains fifteen lessons of 30 words each for a total of 450 words. The JR. HIGH VOCABULARY program covers grades 7-9; the SR. HIGH VOCABULARY program grades 10-12. Available on 32K disk for the Apple II, TRS-80, and the Pet; and on 64K disk for the IBM PC and the Commodore 64.

6D-V2A Jr. High Vocabulary (Apple) $200.00
6D-V2P Jr. High Vocabulary (Pet) $200.00
6D-V2T Jr. High Vocabulary (TRS-80) $200.00
6D-V2M Jr. High Vocabulary (C64) $200.00
6D-V2B Jr. High Vocabulary (IBM) $200.00
6D-V1A Sr. High Vocabulary (Apple) $200.00
6D-V1P Sr. High Vocabulary (Pet) $200.00
6D-V1T Sr. High Vocabulary (TRS-80) $200.00
6D-V1M Sr. High Vocabulary (C64) $200.00
6D-V1B Sr. High Vocabulary (IBM) $200.00

WORDSEARCH

This program allows a teacher to enter a series of words, out of which the Apple will create its own unique word-search puzzle! Options include whether to overlap words, place words frontwards, backwards, and diagonal, or to place them only left to right and top to bottom. The words used are printed underneath the puzzle; an answer key can be printed upon request. Use of a printer is required. Available for the Apple II with 48K and disk.

4H-1301 Wordsearch $29.95

DIETING DINOSAUR 2

The DIETING DINOSAUR word game uses a positive-reinforcement variation of the hangman format to promote vocabulary, spelling, and writing skills. The game is hosted by a resident dinosaur who is on a strict diet and can only eat letters which fit into the word to be guessed; students have the opportunity to feed the creature while expanding their vocabulary! Major features include extensive keyboard error-checking, large printing, optional upper and lower case letters, random or sequential word selection, extensive documentation, and an instructor-modifiable word list. A great way to add enthusiasm to your language class! Available for the TRS-80 on 16K cassette and 32K disk; grade level is 7 & 8.

2X-DDM Dieting Dinosaur 2 (cassette) $29.95
2X-KDM Dieting Dinosaur 2 (disk) $34.95

WORD PREP

These two vocabulary programs will provide useful reinforcement drill for any student in the language arts. WORD PREP BASIC contains 500 words and definitions suitable for upper elementary and junior high school levels; WORD PREP ADVANCED includes 1000 words for senior high school students. Both programs allow the instructor to input word lists and definitions. An excellent means for providing vocabulary instruction! Available for the Apple II with 32K and disk.

6M-3231 Word Prep Basic $24.95
6M-3241 Word Prep Advanced $29.95

PLATO LANGUAGE VOCABULARY BUILDERS

These programs from Control Data's PLATO software series provide practice in Spanish, French, and German vocabulary. Each program presents over 500 words in English-to-language and language-to-English translations. Two game formats are provided: the first is a "hangman" type game, and the second is a "pyramid" game in which each student answers 20 multiple choice definition questions. Available for the Apple II and the Atari with 48K and disk, PLATO LANGUAGE VOCABULARY BUILDERS have been thoroughly tested and proven in the academic community. Junior and senior high school level.

8L-4050 PLATO Spanish Vocabulary (Apple) $60.00
8L-5050 PLATO Spanish Vocabulary (Atari) $60.00
8L-4040 PLATO French Vocabulary (Apple) $60.00
8L-5040 PLATO French Vocabulary (Atari) $60.00
8L-4060 PLATO German Vocabulary (Apple) $60.00
8L-5060 PLATO German Vocabulary (Atari) $60.00

THE SPANISH HANGMAN

This fast-paced program uses the hangman format to teach 450 Spanish sentences. These sentences include 300 of the most common Spanish idioms; the separate vocabulary sections contain a total of 1600 words. A highly-rated program. Available on 48K disk for the Apple II and TRS-80. "... an excellent instructional media tool for review or drill." — *THE COMPUTING TEACHER.*

3H-GE4A The Spanish Hangman (Apple).....$29.95
3H-GE4T The Spanish Hangman (TRS-80) $29.95

THE FRENCH HANGMAN

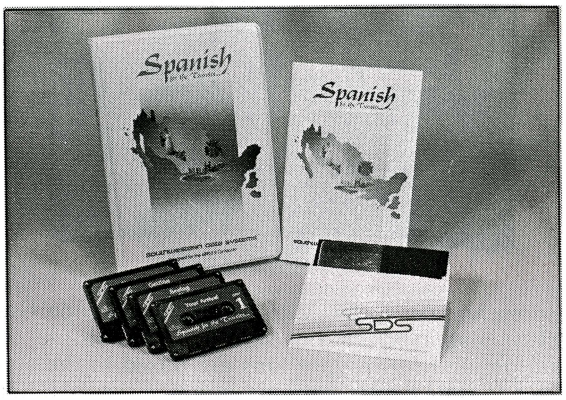
Using a special high resolution screen alphabet, THE FRENCH HANGMAN follows in the footsteps of the very popular SPANISH HANGMAN to provide practice in French vocabulary. Includes over 1000 words and 350 sentences, plus many proverbs; an excellent addition to the HANGMAN series. You'll never get your head stuck in a noose over this one! Available for the Apple II with 48K and disk.

3H-GE10 The French Hangman $29.95

FOREIGN LANGUAGE VOCABULARY DRILL

A series of drill and practice programs written by a foreign language teacher for German, French or Spanish translations to English and vice versa. Included are practice files which may be modified by either the instructor or the student, and a score summary which is presented at the conclusion of the program. Applicable to any introductory language course. Available on 32K disk for the Apple II and the Atari.

2L-503A German Vocabulary (Apple) $29.95
2L-503R German Vocabulary (Atari) $29.95
2L-512A French Vocabulary (Apple) $29.95
2L-512R French Vocabulary (Atari) $29.95
2L-522A Spanish Vocabulary (Apple) $29.95
2L-522R Spanish Vocabulary (Atari) $29.95



SPANISH FOR THE TRAVELER

SPANISH FOR THE TRAVELER is a multi-media language software program: an audio cassette acts as a pronunciation guide for words and phrases, while the computer does the teaching and testing. The program is divided into seven instructional units, covering such topics as checking into a hotel, ordering a meal, and using common phrases. The complete package is available on disk for the Apple II with 48K and the IBM PC with 64K; an audio cassette recorder is also required.

6H-510701 Spanish for the Traveler (Apple) $59.95
6H-510123 Spanish for the Traveler (IBM) $59.95

FRENCH DELICACY SPANISH SIRLOIN

Two word games from the DIETING DINOSAUR series (described in the Language Arts section) which use a positive-reinforcement variation of the hangman format to promote vocabulary, spelling, and writing skills in French and Spanish. The game is hosted by a resident dinosaur who is on a strict diet and can eat only letters which fit into the word to be guessed; students have the opportunity to feed the creature while expanding their vocabulary. Major features include extensive keyboard error-checking, large printing, optional upper and lower case letters, random or sequential word selectiion, extensive documentation, and an instructor-modifiable word list. A great way to add enthusiasm to your foreign-language class! Grade level is 7 to 8; available for the TRS-80 on 16K cassette and 32K disk.

2X-DDF French Delicacy (cassette) $19.95
2X-KDF French Delicacy (disk) $24.95
2X-DDS Spanish Sirloin (cassette) $19.95
2X-KDS Spanish Sirloin (disk) $24.95

SPANISH-FRENCH READ-MASTER SERIES NEW

Students will sharpen their reading comprehension skills with these interactive foreign language programs. Five original stories are presented, each containing ten partially completed passages. The student selects from a list of four choices the missing word or expression that will make the passage correct. Immediate feedback is provided. Three levels cover beginning and intermediate vocabulary. Available for the Apple II with 48K and disk.

7F-100AD Spanish Read-Master I $34.95
7F-110AD Spanish Read-Master II $34.95
7F-120AD Spanish Read-Master III $34.95
7F-200AD French Read-Master I $34.95
7F-210AD French Read-Master II $34.95
7F-220AD French Read-Master III $34.95

Social Studies

GEOGRAPHY EXPLORER

These programs cover the United States and Europe. Graphic maps are displayed on the screen and multiple choice, recognition, and fill-in questions are posed to the student; country and state names, capitals, largest cities, populations, and more are covered. A "Teacher" mode allows the instructor to choose one of several methods for presenting the material to the student. Positive reinforcement is featured. Available for the TRS-80 with 32K and disk.

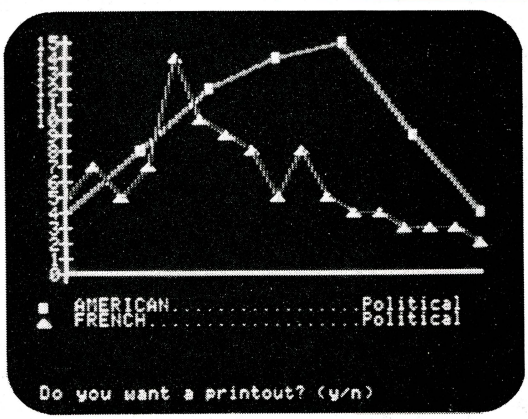
4P-0071RD Geography Explorer: USA $49.95
4P-0121RD Geography Explorer: Europe $49.95

NATIONALISM: PAST AND PRESENT

NEW

The computer can help your students explore the roots of European Nationalism and the process of nation building. They'll become involved in map studies and the techniques of graphing the course of national events while working on projects with the computer. A case-study of the Soviet Union is made as an example of modern nationalism. Simulations, decision making, and analytical thinking all form a part of this comprehensive set. Five disks with back-ups are included; a Teacher's Lesson Planner provides suggestions for integrating the programs into your curriculum. Grade level is 10 to 12; available for the Apple II with 48K.

3X-6010AD Nationalism: Past & Present $159.00



REVOLUTIONS: PAST, PRESENT, & FUTURE

NEW

Here's an interactive approach to the nature of political revolution which will be useful in world history and political science classes. On-screen maps and graphs help students visualize the course of events in a revolution, including the roles of violence, the economy, and political instability. Three historical models analyze the American, French, and Russian revolutions, along with programs that permit the student to establish time-lines and chronologies, graph changing influences, and answer comprehensive questions about the material. Projections of present and future areas of unrest are developed based upon the students' understanding of historical influences. Five disks with back-ups are included in the series; grade level is 10 and up. Available for the Apple II and the TRS-80 with 48K.

3X-6000AD Revolutions (Apple) $159.00
3X-6000TD Revolutions (TRS-80) $159.00

DECIDING POLICIES

Skills in geography and political decision-making are developed in these simulations created by MECC. In *Bargain*, students try to settle a labor dispute; *Crisis* has students resolving an international crisis; *Fail Safe* involves students in issues related to nuclear war; and *Minnag* is a simulation involving farm production. Also included in this series are four drill-and-practice programs on identifying states, continents, and countries. An extensive teacher's guide is included which features program descriptions, learning objectives, lesson plans, sample runs, and student worksheets. Available for the Apple II with 32K and disk; grade level is 9 to 12. A back-up disk is included.

8K-016AD Deciding Policies $39.00

THE TIME DUNGEON

This educational adventure game challenges the student's knowledge of world history. Three games are included, covering ancient history 4000 B.C.-6 B.C.; world history 1894-1919; and 1933-1945. In each game, the player is in a dungeon; to get out, clues and objects must be investigated that will help find a way to the exit. In order to do this the player must correctly respond to questions on the historical period of the game. If questions are answered incorrectly, the correct response will be displayed but the player will not receive any clues or objects to aid in getting out of the dungeon. A truly stimulating approach to history reinforcement! Available for the Apple II with 48K and disk.

2B-26052 Time Dungeon $29.95

U.S. CONSTITUTION TUTOR

This program is designed to prepare students for high school or college exams on the United States Constitution. Contains 175 questions; each response is followed by an explanation of why the answer is correct or incorrect. Student's retention is greatly increased with this technique. Questions are divided into levels of difficulty for beginner, intermediate, and advanced. Available for the Apple II with 48K and disk.

6R-300 U.S. Constitution Tutor $30.00

THE U.S. CONSTITUTION

NEW

Here's a way to use your computer as a social science tool right in your classroom! This 3-program presentation demonstrates the development and functions of the Constitution as the cornerstone of U.S. government. With the help of interactive exercises, charts, graphs, and role playing, students are introduced to government in colonial America, 18th century British government, the Articles of Confederation, the framers of the Constitution, ideas and issues at the Constitutional Convention, Federalists vs. anti-Federalists, and more. Grade level is 10 and up; available for the Apple II with 48K and disk; back-up disks and a Teacher's Lesson Planner are included.

3X-6210AD The U.S. Constitution $99.00

U.S. HISTORY: THE YOUNG REPUBLIC

S 64

Three exciting games provide the format for this testing program on America's history. In *The Thirteen Colonies*, a shooting gallery presents opportunities for student sharpshooters to test their knowledge. The student who is the most expert on *Colonial Life* will win the trophy in an auto race. Climbing tools for scaling a mountain are the rewards in *The American Revolution*. A back-up disk and Teacher Lesson Planner are included in this program for grades 7 to 10. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K.

3X-6801AD U.S. History (Apple) $89.00
3X-6801CD U.S. History (C64) $89.00
3X-6801TD U.S. History (TRS-80) $89.00

WESTERN CIVILIZATION

S 64

World history topics become more interesting with this set of three game-like testing programs. *Ancient World & Middle Ages* is a mountain-climbing game that tests the student's knowledge of Ancient Greece, Rome, and medieval Europe. In *Reformation to Nationalism*, students assemble a rocket ship to escape from a planet by correctly answering questions. *Twentieth Century*, for two players, culminates in a "snowball fight"; whichever player has the most correct answers will get most of the "snowballs." A back-up disk and Teacher Lesson Planner are included in this program for grades 7 to 10. Available on disk for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K.

3X-6861AD Western Civilization (Apple) $89.00
3X-6861CD Western Civilization (C64) $89.00
3X-6861TD Western Civilization (TRS-80) $89.00

ANNAM: A DEVELOPING COUNTRY

S

Students take the role of leader of a small developing country that is aided by a superpower and in rivalry with an aggressive neighbor in this exciting simulation. The country of Annam has a small standing army and many different interest groups; in order to govern well the leader must remain popular and cope with political rivalries. The decisions made for each situation posed by the computer inevitably lead to a new set of conditions with more problems that require additional decisions. Situations are presented at random, so many different endings are possible. Two or more students may work together, adding another dimension to the problem-solving process. Available on disk (back-ups included) for the Apple II with 48K and the TRS-80 with 32K.

3K-250AD Annam (Apple) $59.00
3K-250TD Annam (TRS-80) $59.00

LINCOLN'S DECISIONS

S 64

This program leads your students through the key events in President Abraham Lincoln's life and administration. At each major turning point, they are presented with the choices he faced and are challenged to duplicate his decisions. By putting themselves in Lincoln's shoes, students acquire a sense of the alternative courses that the United States might have followed during this critical period in American history. Colorful graphics highlight the material. Available on disk (back-ups included) for the Apple II with 48K, the TRS-80 with 32K, and the Commodore 64 with 64K.

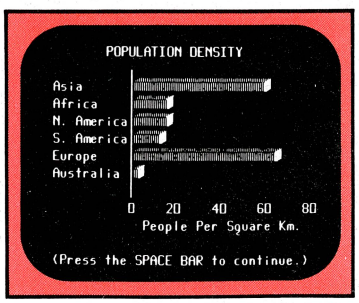
3K-210AD Lincoln's Decisions (Apple) $59.00
3K-210CD Lincoln's Decisions (C64) ..... *New* $59.00
3K-210TD Lincoln's Decisions (TRS-80) $59.00

ELECTORAL COLLEGE

S

Designed by an eminent political scientist, this program illustrates the working of the Electoral College System in the United States. Users actually simulate presidential elections, selecting their own candidates and estimating their likelihood of winning on a state by state basis. Graphic and numerical results are shown. A wide range of options are available. Includes PRIMARY FIGHT, an election strategy game using mathematics. Available for the Apple II and the TRS-80 with 48K and disk.

5H-750AD Electoral College (Apple) $45.95
5H-750TD Electoral College (TRS-80) $45.95



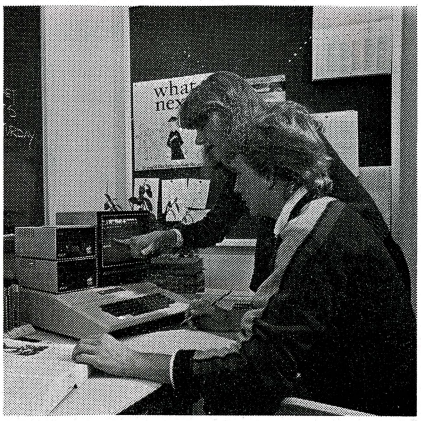
AFRICA NEW

S

Students will gain a better understanding of African history and geography with this interactive program. Part One motivates students to read, analyze, and evaluate a series of questions about Africa. Part Two introduces the major cities, rivers, and landforms through a series of map drills. Students identify various geographical points on a graphic representation of Africa. Correct answers are reinforced and incorrect responses are explained through a branching routine. A management system keeps track of students' scores for each part of the program to identify the areas on which additional work is needed. Grade level is 7 and up; available on disk for the Apple II with 48K and the TRS-80 with 32K. A back-up disk is included.

3K-320AD Africa (Apple) $59.00
3K-320TD Africa (TRS-80) $59.00

Careers and Guidance



COMPUTERIZED CAREER INFORMATION SYSTEM

The CCIS system, under distribution for Bertamax, Inc., includes two program sets of significant value to guidance counselors: *The Career Game* and *Information Files*. *The Career Game* is an exploration program based upon worker-traits. It considers six categories of information for the student/user: work activities, work situations, data-people-things, aptitudes, educational development, and physical demands. The program will evaluate the student's answers and provide a summary of vocations suitable for that individual's traits. The disk will store up to 500 active users at any time, and more may be stored on blank disks. Special routines allow for modifications to add state or local information into the system. *The Information Files* program provides further information on specified careers of interest to the student, either those derived from *The Career Game* or from the student's own research. One of the most extensive and complete systems of its type! Available on disk for the Apple II and TRS-80 with 48K, and the IBM PC with 64K.

2J-91AD Career Information System (Apple) $375.00
2J-91BD Career Information System (IBM) $375.00
2J-91TD Career Information System (TRS-80) $375.00

CAREER DIRECTIONS

This is a computerized career guidance program that allows students to discover their career interests, determine the occupations that correspond to their desires and abilities, explore job requirements and characteristics, and develop an orderly career plan to enter the occupation of their choice. Over 460 specific occupations are described that correspond to U.S. Dept. of Labor publications. Available on 48K disk for the Apple II and TRS-80.

8G-10AD Career Directions (Apple) $89.00
8G-10TD Career Directions (TRS-80) ..... *New* $89.00

THE GRADUATION DILEMMA

The critical decisions that will confront students when they are ready to graduate from high school are depicted in this simulation program. Three education pathways that are open to students are covered: *University Studies*, *Community College*, and *Vocational Training*. A realistic entrance examination is presented for each type of school; if "admitted," the student must then demonstrate coping skills by solving problems that are unique to that particular environment. Grade level is 10 and up; available on 48K disk for the Apple II and TRS-80. The Apple version features high-resolution graphics.

3E-300AD The Graduation Dilemma (Apple).....$150.00
3E-300TD The Graduation Dilemma (TRS-80) $150.00

THE MICRO ART OF INTERVIEWING

In this four-part program, students learn techniques for job interviews and handling the kinds of stress which may be encountered. *The Four States of Interviewing* divides interviews into four parts: "reception-acceptance," which discusses how to make a good first impression; "interrogation," dealing with expected questions; the "your turn" stage, covering what questions the potential employee should ask; and the "negotiation/leave-taking" stage, dealing with how to negotiate salaries and wrap-up the interview. *Skill Identification* describes 126 key words that employers look for in the interview and resume. *Interview Stress* discusses the causes of stress and what to do about it; how to identify and answer illegal questions is also covered. *The Worst Interview in History* is a tongue-in-cheek overview of everything that can go wrong in an interview. The complete set is available on 48K disk for the Apple II and TRS-80.

3E-400AD Micro Art of Interviewing (Apple) $150.00
3E-400TD Micro Art of Interviewing (TRS-80) $150.00

COMPUTERS AND THE NEW WORLD OF WORK

Where will your students find themselves in the computer dominated workplace? Will they cope successfully with the rapid changes in this new job market? Here is an excellent sound filmstrip program that teaches the skills and attitudes necessary for working with computers in the new technology-based job environment. Topics discussed are how computers work, what functions they perform, what job opportunities exist, and what skills are required to be competitive in the work force. Four filmstrips, four cassette tapes, and a teacher's manual are included. Bring your students up to date on the needs of today's ever-changing job market!

ED-344 Computers and the New World of Work $98.00

CAREER SCAN IV

CAREER SCAN IV is a comprehensive career search and exploration package accessing more than 600 occupations; it directly references the major federal occupational publications such as the Occupational Outlook Handbook, the Guide to Occupational Exploration, and the Standard Occupational Classification. Developed by a team of educators, researchers, counselors, and programmers with extensive background in career information development and computer applications, CAREER SCAN IV is totally self-instructional, continually feeding information back to the students and asking them to verify their answers. Students are given lists of possible occupations and references for further information based on their personal profiles. The reading level of the questions and instructions is targeted at eighth grade ability; however, some technical occupational titles and their descriptions may exceed this level. Two disks are included with the CAREER SCAN IV system, one being the Search program and the other a data disk. The program can be used on a one disk-drive system, although a two drive system is recommended. Options for printing hard-copy are included. A comprehensive manual for the counselor is also provided. Available for the Apple II and TRS-80 with 48K, the Pet with 32K, and the Commodore 64 with 64K.

9B-100AD Career Scan IV (Apple) $169.00
9B-100CD Career Scan IV (C64) ..... *New* $169.00
9B-100PD Career Scan IV (Pet) ..... *New* $169.00
9B-100TD Career Scan IV (TRS-80) $169.00

THE CORPORATION JOB GAME

In this simulation of working life, students learn the basics of getting along with co-workers and how to work in an organization. The student's career 'ladder' contains problems and conflicts that must be resolved through making correct choices. Students are awarded points that allow movement up the career ladder based on their mastery of given work situations. Three imaginary characters represent high demand career areas: sales/marketing, data processing/accounting, and engineering/production. The program is suitable for individual or group use, and is available on 48K disk for the Apple II and TRS-80. High school level.

3E-200AD The Corporation Job Game (Apple) ...$150.00
3E-200TD The Corporation Job Game (TRS-80) ..$150.00

WORK ACTIVITIES INVENTORY

Your students will find that the information they can gather from the WORK ACTIVITIES INVENTORY will be valuable in selecting areas of study related to their future goals. This counseling program classifies student interests into six categories: the doers, the investigators, the creators, the helpers, the influencers, and the organizers. Within each of the six interest areas students will learn the major work activities typically performed by people with those interests. The major career clusters relating to each interest area and the types of co-workers or leaders one is likely to encounter are also explored. A second part of the program, "Career Clusters," has the student matching the career clusters with the six major work environments. Available on 48K disk for the Apple II and TRS-80. High school level.

3E-100AD Work Activities Inventory (Apple) $150.00
3E-100TD Word Activities Inventory (TRS-80) $150.00

CAREERS IN COMPUTERS

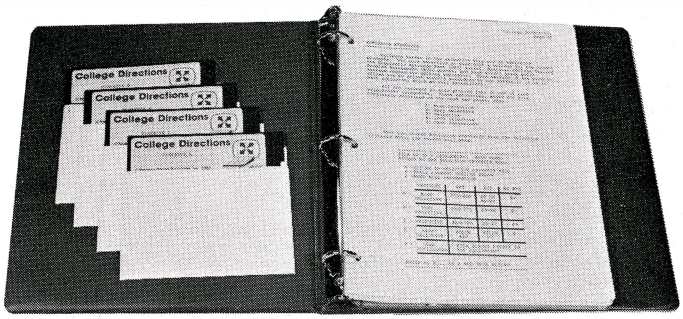
A filmstrip series that informs students about the many job opportunities in the high growth computer industry. It covers what types of jobs are now available, educational requirements, experience, and personal characteristics demanded by the job, as well as general salary descriptions and possibilities for advancement. The job areas covered include programming, data processing, hardware development, servicing, and such peripheral careers as sales, teaching, and consulting. An excellent introduction to computer careers.

3K-FSC393 Careers in Computers (4 filmstrips, 4 tapes, teacher's guide) $83.00

SELF-EXPLORATION SERIES

Knowledge of one's capabilities and potential are key factors in making intelligent career choices. This set of three programs helps students to discover important facts about themselves and about career possibilities. Through a series of questions, each program will evaluate the student's abilities and preferences. WHO AM I? deals with *Money Values, Relationships,* and *Stress Management.* CAREER EXPLORATION focuses on *Occupational Values and Orientation, Career Planning,* and *Internal vs. External Orientation.* STUDY SKILLS evaluates *Attitudes, Thinking, Studying,* and *Learning.* Each program is available for the Apple II with 48K and disk.

3S-10AD Who Am I? $39.95
3S-20AD Career Exploration $39.95
3S-30AD Study Skills $39.95
3S-35AD Self-Exploration Series (set of 3) $107.85



COLLEGE DIRECTIONS

These two self-directed programs will help your students find the two year or four year college that best suits their needs. A systematic question approach evaluates the student's preferences with regards to school size, location, and curriculum; areas of interest; cost limits and financial aid availability; and other relevant considerations. Over 1400 two year colleges, business schools, vocational-technical schools, and junior colleges are covered in the TWO YEAR COLLEGES program, and over 1300 four year colleges and universities in FOUR YEAR COLLEGES; more than 95% of the institutions of higher learning in the U.S. are thus available to the student to research and select from. Routines that provide assistance in writing letters of inquiry and creating a budget of expenses are also included. Each program comes with four disks and a manual; no computer experience is required for operation. Periodic updates are available from the manufacturer. Available for the Apple II and TRS-80 with 48K and two disk drives.

8G-20AD Two Year Colleges (Apple) $145.00
8G-20TD Two Year Colleges (TRS-80) $145.00
8G-30AD Four Year Colleges (Apple) $185.00
8G-30TD Four Year Colleges (TRS-80) $185.00
8G-35AD Two & Four Year Colleges (Apple) $305.00
8G-35TD Two & Four Year Colleges (TRS-80) $305.00

CAREERS WITH COMPUTERS

The availability of jobs in the computer world is growing every day. This filmstrip and audio cassette series points out that computer literacy will give almost any worker an edge in a competitive job market. Examples of many kinds of computers and computer applications are shown. Included are interviews with people working in the industry, which provides a glimpse of the day-to-day work and rewards involved; and the type of training required and how to get it. A teacher's guide is included.

8K-477 Careers with Computers $99.00

THE VALUES AUCTION

In THE VALUES AUCTION, students explore the major reward systems of various work environments and determine what rewards are important to them. The values and rewards are broken down into categories of Prestige, Security, Money, Power & Authority, Independence, Creative Expression, Variety, Helping Other People, and Homelife. In Part 1 of the program, students "bid" against the computer for one of the nine major work values, discovering the importance of the different rewards, how to ration money, and how to plan effectively. In Part 2, each of the nine value systems is explored in depth, including how they relate to career choices and personal preferences. Available on 48K disk for the Apple II and TRS-80.

3E-500AD The Values Auction (Apple) $150.00
3E-500TD The Values Auction (TRS-80) $150.00

Careers and Guidance

COMPU-JOB

COMPU-JOB is a valuable career guidance tool for the employment process. This computer program is divided into four sections: different types of jobs; ways to find a job; getting a job; and keeping a job. The student is guided by the computer through the entire employment process, beginning with how to develop a resume, identify job openings, follow-up the interview, and how to keep a job once hired. Also included are segments on establishing life and employment goals, identifying potential job possibilities, reading the "help wanted" ads, using the telephone, making personal visits, and things one should know before accepting a job. Other topics include the first day on the job: identifying employee expectations; establishing good working relationships; understanding gross pay, net pay and deductions; developing a family budget; and maintaining a bank checking account. COMPU-JOB comes with 5 copies of a student workbook; the computer program directs students to specific pages in the workbook to provide written reinforcement and additional information regarding certain phases of the employment process. Available on 48K disk for the Apple II and TRS-80; additional student workbooks can be purchased separately.

5E-100A Compu-Job (Apple) $99.00
5E-100T Compu-Job (TRS-80) $99.00
5E-105 Compu-Job Student Workbook $9.95

SCHOLARSHIPS TODAY

This unique program allows students to explore financial aid programs sponsored by federal and state government organizations. For each type of aid, information is presented on eligibility criteria, the dollar amount available, and application procedures and deadlines. The program will assist students in writing letters of inquiry requesting the appropriate government agency to send application forms and additional information. Among the scholarships described are Pell Grants, Guaranteed Student Loans, Plus Loans, Supplemental Educational Opportunity Grants, College Work-Study Programs, National Direct Student Loans, and various state aid programs. Available on 48K disk for the Apple II and the TRS-80.

8G-40AD Scholarships Today (Apple) $65.00
8G-40TD Scholarships Today (TRS-80) $65.00

COLLEGE SCAN IV

COLLEGE SCAN IV could well be the most widely used program in your career center! It is a time-saving and unique reference system that assists students in identifying the specific colleges and universities that are best suited to their needs. Approximately 1100 institutions are included in the system, each coded with over 350 variables by which they can be selected. Among the variables are the courses of study, costs, location, size, academic standing, student body characteristics, institutional regulations, athletic programs, and more. Once information about a particular college is obtained, the student can then discuss available options with a counselor and make arrangements to contact the schools for further information. All data is in accordance with U.S. Department of Education guidelines; periodic updates are available from the manufacturer. COLLEGE SCAN IV is available for the Apple II and TRS-80 with 48K and disk, and comes with an extensive instruction manual.

9B-200AD College Scan IV (Apple) $195.00
9B-200TD College Scan IV (TRS-80) $195.00

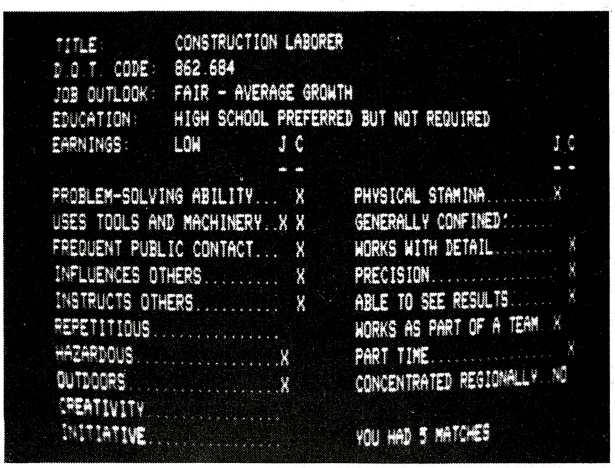
CCAPP made me think about careers not considered before....

		Yes	No	Total
9	M	7	0	7
	F	8	3	11
10	M	12	2	14
	F	14	3	17
11	M	15	2	17
	F	15	2	17
12	M	10	6	16
	F	16	4	20
Total	M	44	10	54
	F	53	12	65

COMPUTERIZED CAREER ASSESSMENT & PLANNING

Students become involved in the learning process of career decision making through this motivating approach to career guidance. The computer learning activities featured in this series help students determine career interests, preferences, and abilities; select and explore career clusters; delineate and select relevant occupations; and develop a plan to enter the occupation of their choice. Information in the system is based on the Guide for Occupational Exploration, the Occupational Outlook Handbook, the Dictionary of Occupational Titles, Lovejoy's College Guide, and Barron's Profiles of American Colleges. Eight disks and a comprehensive manual are included; available for the Apple II with 48K.

8G-50AD Computerized Career Assessment $485.00



OCCUPATIONAL INTEREST MATCHING

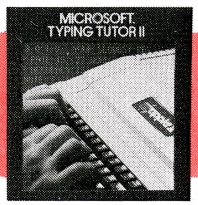
Students explore information on a variety of jobs and investigate occupations that correspond to their preferences with this guidance program. A series of 20 questions is presented to the student, and the responses are compared to the characteristics of more than 590 occupations as defined by the Department Of Labor. Detail information, such as salary, educational requirements, etc., can be displayed for each occupation. The relationship between educational plans and occupational opportunities is emphasized. Available on 48K disk for the Apple II and TRS-80.

4U-100AD Occupational Interest Matching (Apple) $89.95
4U-100TD Occupational Interest Matching (TRS-80) $89.95

TYPING TUTOR

TYPING TUTOR takes the student through four levels of typing proficiency, from beginner to advanced. Features *Time Response Monitoring*, a unique system for monitoring the keyboard and analyzing skills and progress. It keeps track of the keys learned, those currently being taught, and those yet to be learned, allowing for an individualized pace. The concept of words-per-minute is introduced and developed early in the program, and all performance factors are tabulated for immediate feedback, including speed, accuracy, number of errors, and the 'troublesome' keys. Available for the Apple II with 48K and disk. "TYPING TUTOR demonstrates the potential of microcomputers for instruction." — *APPLE JOURNAL.*

6H-2202 Typing Tutor $24.95



MICROCOMPUTER-ORIENTED ACCOUNTING

NEW

Reinforce your students' basic accounting knowledge with this instructional package. A text-workbook is utilized in conjunction with the computer to give students step-by-step instructions on how to journalize, post, prepare trial balances and portions of a worksheet, do bank reconciliations, do a payroll, and prepare depreciation schedules. Students may also store their working data on the disk. Available for the Apple II and TRS-80 with 32K and the IBM PC with 64K.

9G-357AD Microcomputer Accounting (Apple) $66.00
9G-356TD Microcomputer Accounting (TRS-80) .. $66.00
9G-355BD Microcomputer Accounting (IBM) $66.00

INTRODUCTION TO DATA PROCESSING

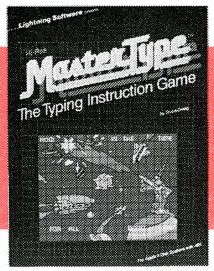
This filmstrip and audio tape set presents an overview of the computer and its role in the business world. The topics covered include the background development and history of the computer; computer functions; storage media; computer languages; programming; bits and bytes; and general data processing procedures. A useful introduction for any business-oriented student of computers. Includes 4 filmstrips and 4 cassettes.

EB-125 Introduction to Data Processing $145.00

TEACHING ACCOUNTING ON THE COMPUTER

Produced by MECC for advanced or second-year accounting students, this package provides a realistic experience using automated accounting systems. Included are the general ledger, accounts payable, accounts receivable, and inventory control systems, which are modular and can be introduced one at a time or used together. Using a prepared set of accounts, vendors, vouchers, customers, invoices, and inventory, students carry out a series of simulated business projects. An extensive teacher's guide provides master sheets for handouts, a set of complete input forms, and all reports and proofs. Two disk drives and a 132-column printer are required. TEACHING ACCOUNTING is a practical application system that will insure your students have a firm grasp of accounting principles. Designed for the Apple with 32K and disk.

8K-002AD Teaching Accounting $59.00



MASTERTYPE

64

MASTERTYPE is the typing program that your students will never want to stop using! It features brilliant animated color graphics and science-fiction sound effects; its exciting arcade game action will make typing drill the highlight of the day. Spaceships containing words approach the student's "space station" in the center of the screen. To prevent being "zapped" by the aliens, the student must type the words correctly. The lessons progress from simple words and home row keys to more complex vocabulary and the full keyboard. Available on disk for the Apple II and the Atari with 48K, and the IBM and Commodore 64 with 64K. "You ought to charge your students a quarter each time they use this program. You would gain back the cost of the software within a week."— *COURSEWARE REPORT CARD.*

5C-LM101A Mastertype (Apple) $39.95
5C-LM101B Mastertype (IBM) ..... *New* $49.95
5C-LM101C Mastertype (C64) ..... *New* $39.95
5C-LM101R Mastertype (Atari) $39.95

ECONOMICS: WHAT, HOW, & FOR WHOM?

NEW

Learning the basic principles of economics can be easier than ever with this comprehensive package. Five units are included: *What is Economics?; Definitions and Laws; Economic Systems; Capitalism, Communism, and Socialism;* and *Economic Models*, a classroom demonstration unit. A Teacher's Lesson Planner helps you to integrate the programs into your curriculum; five disks with back-ups are included. Grade level is 10 and up; available for the Apple II and the TRS-80 with 48K. "Supply" the answers to your students' "demands" with ECONOMICS!

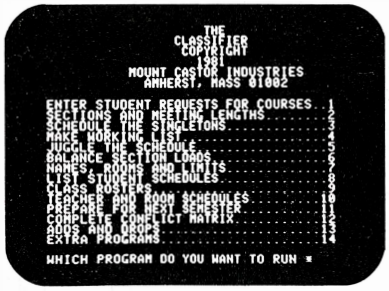
3X-6100AD Economics (Apple) $159.00
3X-6100TD Economics (TRS-80) $159.00

COMPUTER BUSINESS APPLICATIONS SERIES

This series of three programs introduces the use of computers in business applications. Each unit is written in a light and humorous manner with extensive use of graphics, making them ideal for use by the novice. Unit 1 is entitled *Business Applications* and demonstrates a variety of useful programs including income tax, mortgage, college financial aid applications, payroll, inventory, and sales reporting. Unit 2, *The Uses of a Database*, shows the advantage of using a computer to store and sort information. Unit 3 is *Business Forecasting*, which shows how the computer can be used to forecast future conditions based on past and future trends. Each unit is for the Apple II with 48K and disk; their running times vary between 25 and 40 minutes. An excellent introductory series for the business student!

4M-500 Business Applications $46.45
4M-600 The Uses of a Database $46.45
4M-700 Business Forecasting $38.45
4M-960 Computer Business Applications Series $125.00

Teachers and Administrators



THE CLASSIFIER

The biggest headache facing school administrators each semester comes from trying to provide a comprehensive schedule of classes. THE CLASSIFIER can be the cure! It will schedule up to 1400 students and 250 courses, fulfilling 99% or more of the students' course requests. The system will analyze the number of sections of each course which are required; the administrator then specifies the schedule restrictions, such as requesting that all French classes be non-overlapping if only one French teacher is available. As many of these variables can be added to the system as are required. THE CLASSIFIER will then take this information and the student requests and produce a master schedule. The administrator assigns specific teachers and rooms to each course section, whereupon the system will print out individual student schedules, class rosters for each section, teacher schedules, and room usage schedules. Don't wait, cure those headaches with THE CLASSIFIER! Available for the Apple II and TRS-80 with 48K and two disk drives. Both versions require an 80-column printer.

6S-100AD The Classifier (Apple) $495.00
6S-100TD The Classifier (TRS-80) $495.00

THE OFFICER

THE OFFICER is a complete attendance package that can provide a school with all of the information needed to fulfill state reporting requirements. After the homeroom period, the names of students not present are entered into the computer and an alphabetized absence list is produced in minutes. At the end of the day, an up-date program can be run to specify why each student was not present. Once a month, or more often if desired, a utility program is run which produces an attendance summary for each student and a report on the number of student-days missed by grade level and type of absence. Available for the Apple II and TRS-80 with 48K and two disk drives. Both versions require an 80-column printer.

6S-200AD The Officer (Apple) $195.00
6S-200TD The Officer (TRS-80) $195.00

THE REPORTER NEW

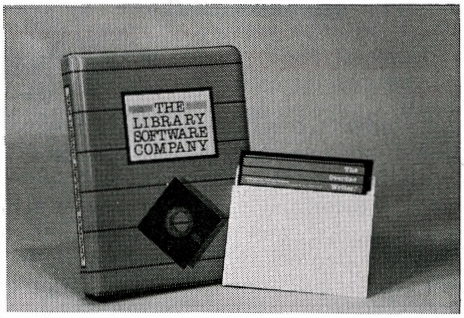
If report card time sets your staff into a frenzy, consider THE REPORTER program. It is a complete grade reporting package capable of handling up to 1500 students. Among the features that make it adaptable to any school are the use of up to eight marking periods per academic year; the accomodation of either number or letter grades, with any desired "weight" assignable to the letter grades; up to 15 different courses per student during the school year; course grades which can be entered from class rosters and easily modified; up to 30 standard "comments" which may be defined and printed on the report cards; choice of printing full report cards or labels for the students' permanent records; and reports of students with failing grades, sections and courses with missing grades, and a class ranking for each grade level. Data can be transferred from THE OFFICER and THE CLASSIFIER programs to reduce keyboard entry time. Available for the Apple II with 48K and disk.

6S-300AD The Reporter $495.00

THE OVERDUE WRITER: LIBRARY CIRCULATION

Library personnel can now automate the time-consuming task of overdue record keeping and spend more time doing what every librarian wants to do: helping library patrons. THE OVERDUE WRITER is a book circulation progam that will keep track of all student records and print lists, overdues, and bills. You do not need to have a computer in the library; only 15 to 60 minutes a day of computer time is necessary, so another department's computer could be used whenever it is free. The system can handle an average of 500 checkouts a week, and is easy to run so that library assistants or student aides can operate it. THE OVERDUE WRITER requires 48K, an 80-column printer, a disk drive, and is available for the Apple II and TRS-80 Model III. If you're looking for ways to reduce your paperwork and get on with the business of being a librarian, then this is the system for you! "THE OVERDUE WRITER is a sound first step for small library automation." — *ELECTRONIC LEARNING.*

5X-100AD The Overdue Writer (Apple) $149.95
5X-100TD The Overdue Writer (TRS-80) $149.95



THE BIBLIOGRAPHY WRITER

Librarians, you'll never have to retype an entire bibliography or tack entries on to the end of one when you want to add new books. THE BIBLIOGRAPHY WRITER allows you to keep your entire collection up to date and at your fingertips. Each entry can be stored with up to six items of information, including author, title, call number, publisher, city, and copyright date; each new entry is stored automatically in alphabetical and call number order. Up to 500 items can be stored on a single disk, and as many disks as are required may be used. The complete bibliography can be printed in order by author, title, or call number. Additions, changes, and deletions are easily accomplished. Available on 48K disk for the Apple II and TRS-80; an 80-column printer is required.

5X-200AD The Bibliography Writer (Apple) $69.95
5X-200TD The Bibliography Writer (TRS-80) $69.95

THE A-V CATALOG WRITER

Now a small library can produce an in-house catalog of its A-V holdings for distribution to faculty or for reference in the library. Each item is recorded with six descriptors (media type, shelf list number, title, producer, contents, and copyright); the program will then store each entry by subject area. Each item may be listed under three different subject headings. Both shelf lists and subject catalogs can be printed, thereby allowing for distribution of specific lists of materials to particular departments. Up to 1000 items can be stored per disk; as many disks as are required may be used. Available on 48K disk for the Apple II and TRS-80; an 80-column printer is required.

5X-300AD The A-V Catalog Writer (Apple) $89.95
5X-300TD The A-V Catalog Writer (TRS-80) $89.95

INSTRUCTIONAL COMPUTER LITERACY

This program, designed for use by teachers and administrators, provides hands-on experience in how to utilize microcomputers in the school. Among the topics discussed are an introduction to computers; instruction with the micro, including drill and practice, tutorial, and simulation; setting up and managing a micro facility; and the selection and evaluation of software. The step-by-step, self-paced format of the program is suitable for use either by individuals or small groups. After mastering the INSTRUCTIONAL COMPUTER LITERACY program, any teacher or coordinator will be able to set up an in-class or media center-based microcomputer program for computer assisted instruction. Available on disk (back-ups included) for the Apple II with 48K, the TRS-80 and the Pet with 32K, and the Commodore 64 with 64K.

3K-220AD Instructional Computer Literacy (Apple) $69.00
3K-220CD Instructional Computer Literacy (C64) $69.00
3K-220PD Instructional Computer Literacy (Pet) ... $69.00
3K-220TD Instructional Computer Literacy (TRS) $69.00

READABILITY

READABILITY is a teacher utility program that measures the difficulty level of text material according to nine different formulas, including Dale-Chall, Fry, Flesch, Flesch-Kincaid, Fog, ARI, Coleman, Powers, and Holmquist. Results are displayed in both text and graphic format. Includes an easy-to-follow User's Manual and tutorial sample run. An excellent tool for teachers, curriculum specialists, authors, and librarians; available for the Apple II with 48K and disk.

6M-4041 Readability $44.95

FINDING READABILITY LEVELS

Finding readability levels is fast and easy with this program developed by MECC. The instructor enters from one to ten text passages or book selections, and the program will analyze and calculate the readability level in seconds. The following readability formulas can be utilized: Spache, Fry, Dale-Chall, Raygor, Flesch, and Gunning-Fog. A forty-page support book demonstrates each step and illustrates sample runs. Hard-copy output can be generated on a printer. Available for the Apple II with 48K and disk.

8K-127 Finding Readability Levels $39.00

READING LEVEL ANALYSIS

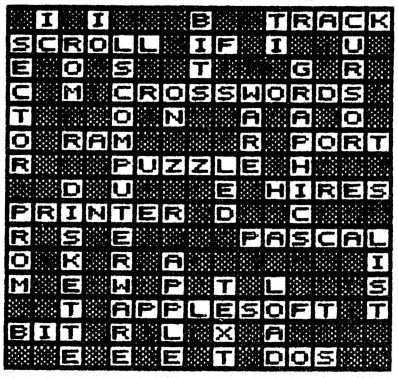
This computer program can calculate the reading level of printed material quickly and accurately. Five scales can be selected, including Dale-Chall, Flesch, Fog, Smog, and Fry Coordinates. The disk version also includes Spache and Wheeler Wilson. The instructor types in about 100 words from the material to be evaluated, presses a key, and can sit back and watch the computer do all the work. An option for outputting to a printer is included. A definite time saver for anyone dealing with reading level evaluation! Available on disk for the Apple II and the TRS-80 with 48K, and the IBM PC with 64K; and the TRS-80 with 48K and cassette.

2J-71AD Reading Level Analysis (Apple) $39.95
2J-71TC Reading Level Analysis (TRS, cassette) .. $39.95
2J-71TD Reading Level Analysis (TRS, disk) $39.95
2J-71BD Reading Level Analysis (IBM) $39.95

ZENITH EDUCATION SYSTEM

Create customized tests and lessons for your students with this comprehensive package. The ZENITH EDUCATION SYSTEM is controlled through a series of easy-to-understand menus, allowing you to create or modify lessons, questions and student records, as well as produce performance reports for individual students or for an entire class. Includes a graphics-generation program to create high resolution charts, diagrams, graphs, or shapes, and incorporate them into the lessons. The completed lessons are transferred to a separate disk for the students to run, and upon which their responses and data are recorded. Up to nine revision or review questions may be implemented from each original question, branching from the initial answer at the instructor's discretion. Includes a comprehensive manual in a durable three-ring binder. Available for the Apple II with 48K and disk. "... Z.E.S. can easily pay for itself many times over." —*INFOWORLD.*

2C-P10 Zenith Education System $249.95



CROSSWORD MAGIC

Crossword puzzles are a favorite medium for language arts activities or for presenting quiz or worksheet material. Now, with this versatile program, crossword puzzles that formerly took several hours to compose can be created in minutes! Words and clues are entered by the instructor and the computer arranges them into a neat, interlocking puzzle with the clues printed underneath. The completed puzzles can be saved, and played by students on the screen or printed as hardcopy for duplication. An answer key can also be printed. Available for the Apple II and Atari 800 with 48K and disk. A printer with graphics capability is required for hardcopy. "It really is magic!" — *COURSEWARE REPORT CARD.* "... an effective use of the computer..." — *EDUCATIONAL COMPUTER.*

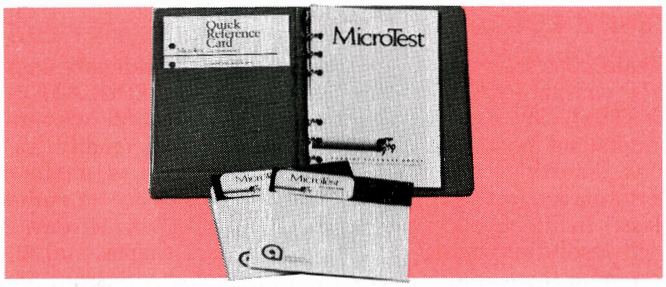
5M-100AD Crossword Magic (Apple) $49.95
5M-100RD Crossword Magic (Atari) $49.95

GRADEKEEPER

This exceptional program was developed by a teacher for storing class grades, and features easy menu-controlled choices and keyboard input. The program records data for up to 33 students in a class; allows up to 27 sets of test scores for each student; provides weighted scores for semester averaging; computes score ranking and mean, median, mode, and standard deviation plots; distribution in graph form; and uses simple editing options for changing student data. An excellent aid for the teacher, available for the TRS-80 Model III with 48K and disk.

2J-72TD Gradekeeper $39.95

Teachers and Administrators



MICROTEST

MICROTEST is a test-generation system offering unprecedented ease of use, flexibility, and control for the instructor. The system allows the teacher to create, refine, update, store, and generate a wide variety of tests, from quizzes to major examinations. The straightforward menu directions make it simple to define, redefine, and administer tests in any subject area at any level. Over 700 questions and answers can be stored on a single data disk. When a test is needed covering the same subject as a previous test, it can be created by using questions in a different order, combining questions from previous tests, or adding new questions. Complete editorial control of the test is assured, allowing instructors to tailor exams to their specific instructional goals and objectives. Available for the Apple II and TRS-80 with 48K, and the IBM PC with 64K; two disk drives are required.

2U-100AD Microtest (Apple) $195.00
2U-100BD Microtest (IBM) $195.00
2U-100TD Microtest (TRS-80) $195.00

PARENT REPORTING

This "mini-word processor" lets a teacher send personalized messages home for each student in a class. Standard phrases can be input for all of the messages, such as class activities for the week or month. Each student's name can be inserted at any point on his or her individual message with the standard phrases. ("Sally took part in our class discussion this week.") Up to eight categories of subject areas and their grades can be listed in a section of the message. This great time saver will help you keep in touch with your students' parents. Available for the Apple II with 48K and disk; a printer is required.

4H-2505 Parent Reporting $39.95

MEDIA EQUIPMENT MANAGEMENT

Efficient and effective equipment management is the goal of this set for the media and audiovisual specialist. The first program, *Inventory of Equipment,* provides a complete inventory control system for the library or media center. Up to 600 items can be recorded and located in the data base by name, make, serial number, type, ID number, vendor, or purchase date. *Scheduling of Equipment* compiles a list of the equipment scheduled on a daily basis by type, name of borrower, and department; the total amount of time scheduled can be compiled by type, month, and year. Both programs have provisions for noting equipment that is down for repair. Available on disk (back-ups included) for the Apple II and TRS-80 with 48K, the Pet with 32K, and the Commodore 64 with 64K.

3K-230AD Media Equipment Management (Apple) $178.00
3K-230TD Media Equipment Management (TRS-80) $178.00
3K-230PD Media Equipment Management (Pet) $178.00
3K-230CD Media Equipment Management (C64) $178.00

TEST BANK

If you find preparing exams to be a chore, then THE TEST BANK is sure to make the grade! This sophisticated exam preparation program can produce tests in a fraction of the time and with fewer errors than one could possibly do by hand. Using simple one-key commands, an instructor can develop tests in any desired format; a built-in word-processor then takes over for efficient entry of test questions. All questions are stored in test "banks" and can be recalled and reassembled at any time quickly and easily. Among the system's features are the ability to search for questions by keywords, phrases, subject areas, difficulty levels, or other teacher-defined categories; grouping of questions by type, such as essay, multiple choice, etc., with automatic renumbering; random order changing to provide several versions of the same test; merging of items from several banks to produce a composite exam; plus many other useful options. Designed for the TRS-80 with 32K and disk, THE TEST BANK takes full advantage of the microcomputer's many capabilities in a user-friendly and easy-to-operate package. *CLASSROOM COMPUTER NEWS* gave the TEST BANK "a four-star recommendation."

4J-100TD The Test Bank $199.00

AUDIO VISUAL EQUIPMENT

A unique program that details the different parts and the basics of operation of the Apple microcomputer, the filmstrip or slide projector, the opaque projector, the overhead projector, and the 16mm film projector. A useful instructional tool for all A-V lab personnel, with superb graphics. Available for the Apple II with 48K and disk.

2C-1650 Audio-Visual Equipment $29.95

RECORDS

This is a sophisticated recordkeeping and grade recording system for the TRS-80 Model III. It will handle classes of up to 200 students with up to 16 evaluations during a term. Comprehensive student information can be selectively recalled and displayed on the screen or on a printer, including class listings that show a student's complete evaluation history with ranking, and class statistics that display the mean, standard deviation, and frequency histogram of each evaluation. RECORDS also performs complex grade computations using weighted evaluations, best scores only, mandatory evaluations, extra credit, and other options. Class rosters and evaluation grades are easily edited at any time. A comprehensive manual accompanies the program, which requires 32K and disk.

6N-100TD Records $69.95

MICROCOMPUTERS IN EDUCATION

This book is presented as a non-technical guide for teachers and administrators to the instructional and school management applications of microcomputers. It raises stimulating issues, takes a hard look at the problems and limitations of microcomputers in the schools, and provides the reader with detailed information about vendors, organizations, publications, and the state of the art in educational computing. Some of the chapter titles are *Microcomputer Concepts, Building Staff Skills, A Microcomputer Center, Planning a System, Computers and Special Education, Micro Assisted Administration,* and *Computer Confrontation.*

5R-465 Microcomputers in Education $14.95

CURRICULUM MANAGER

The CURRICULUM MANAGER allows teachers and principals to coordinate the instructional program and have rapid access to information on student progress. With this system teachers may set individual curriculum goals for each of their students and monitor progress on a daily, weekly, or monthly basis. Students get the benefit of a clear and objective statement of what they need to accomplish, while parents receive a graph of monthly progress showing where their child stands relative to the school's educational program. The school principal can act as the instructional leader by advising teachers on the goals they select for their classes, and superintendents receive a monthly by-school summary showing the percentage of pupils meeting the selected objectives. Additional features are the ability to inventory and forecast material and supply needs, and keep track of student attendance. Available for the Apple II with 48K and disk; a principal's manual and 15 teacher's manuals are included. "...a practical and well-thought out system for planning instruction..." — *ELECTRONIC LEARNING.*

7C-100AD Curriculum Manager $300.00

APPLYING THE APPLE II

Classroom instructors can get a clear picture of the many ways the Apple II can help in the classroom with this demonstration kit developed by MECC. Eight programs illustrate the Apple's special features and instructional applications in drill and practice, tutorials, simulations, worksheet generation, educational games, problem solving, and student programming. Samples are provided in the areas of science, social studies, mathematics, reading, music, and industrial arts. Suggested lecture outlines and transparencies accompany each program. An extensive user's guide is also included, which contains program descriptions, technical information, and sample worksheets. Requires 32K and disk; a back-up disk is included.

8K-001AD Applying the Apple II $39.00

DESIGNING INSTRUCTIONAL COMPUTING MATERIAL

This is a comprehensive training course developed by MECC. The complete package provides invaluable guidelines for courseware development, covering motivation, analysis, text and graphics, interaction, and evaluation. Learn how the experienced educators of MECC developed and refined their renowned instructional packages, and how you can do the same. An extensive teacher's guide contains transparencies and masters for handouts. Available for the Apple II with 32K and disk.

8K-025AD Designing Instructional Computing Materials $70.00

EDUCATORS, PARENTS, & MICROS

NEW

How to facilitate the introduction of computers into your school is the topic of this useful book. It provides a systematic way to design a curricular program, and covers questions such as how to involve parents, make the best use of limited resources, and how to foster staff and district support. Some of the chapters include *Raising Money for Micros, Creating After-School Programs, Where to find Materials,* and more. This set of "working plans" will insure that your efforts will result in an effective school microcomputer program.

5R-422 Educators, Parents, & Micros $15.95

ADVANCED APPLESOFT PROGRAMMING COURSE

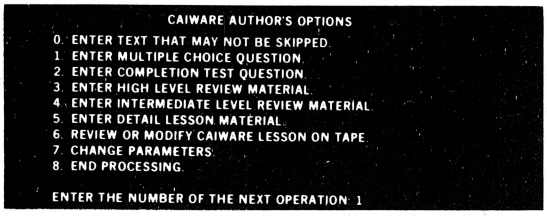
This inservice program for teachers was developed by MECC, and is intended for those with background in BASIC programming and algorithm design. The course contains material for five lecture-discussion sections, each up to three hours in length, with one- to two-hour follow-up lab sessions. The program disk offers samples of the programs used in the lecture as well as providing solutions to the exercises. Among the topics covered are Boolean arithmetic; special CALLS, PEEKS, and POKES; functions; game control usage; error processing; subscripted variables; sorting techniques; sequential files; and random access files. An extensive leader's guide is included which contains outlines and notes, assignments, problem solutions, and masters for handout sheets. Available for the Apple II with 32K and disk; a back-up disk is included.

8K-022AD Advanced Applesoft Programming $39.00

COURSEWARE IN THE CLASSROOM

Any teacher involved with the acquisition of computer courseware should read this text, covering the selection, organization, and use of educational software. Written by Ann Lathrop and Bobby Goodson, two nationally-recognized computer educators, it covers such topics as *Classroom and Curriculum Applications, Approaches to Problem Solving, Tools for Teachers, Reinforcement and Remediation, The Evaluation Process, Evaluation Criteria, Policies and Procedures,* and more. A complete appendix includes evaluation guidelines, sources of courseware reviews, and a list of courseware directories.

2E-20007 Courseware in the Classroom $9.95


CAIWARE AUTHOR'S OPTIONS
0. ENTER TEXT THAT MAY NOT BE SKIPPED.
1. ENTER MULTIPLE CHOICE QUESTION.
2. ENTER COMPLETION TEST QUESTION.
3. ENTER HIGH LEVEL REVIEW MATERIAL.
4. ENTER INTERMEDIATE LEVEL REVIEW MATERIAL.
5. ENTER DETAIL LESSON MATERIAL.
6. REVIEW OR MODIFY CAIWARE LESSON ON TAPE.
7. CHANGE PARAMETERS.
8. END PROCESSING.
ENTER THE NUMBER OF THE NEXT OPERATION: 1

CAIWARE

CAIWARE is a system for creating and using lessons on the TRS-80. A set of menu choices guides the instructor in the creation of tests, tutorials, or any other material for computer presentation to the student. Multiple choice, true-false, and fill-in questions may be selected. Built-in word processing functions allow complete flexibility in creating lessons and questions. Comprehensive management functions are included, such as branching based on student responses and pre-selected performance criteria, complete record keeping of multiple student scores, and generation of instructor reports. Available for the TRS-80 with 48K and disk.

6F-20D Caiware $219.00

APPLE GRADE BOOK

This grade reporting system for the Apple can handle 40 grades per student and up to 250 students divided in up to 25 classes. The teacher has the option of weighting grades, and can keep track of students who have been absent for an activity. Other features include a listing of each student's record, class records, sorting by name and grade, standard deviation, histograms of student averages, complete editing and correction capabilities, and back-up class files. Available on 32K disk.

5A-AG069 Apple Grade Book $34.95

School Business Management

VISICALC

VISICALC is the program that the reviewers have flipped over! An electronic spreadsheet that allows one to postulate almost any type of "what-if" numeric problem, no matter how complex; you can change any number or variable and the entire spreadsheet will be instantly refigured for you! Unsurpassed for budget planning and forecasting, cash flow, sales or stock analysis, or any other numeric computation utilizing a row-and-column format. Includes numerous math functions, a wide range of display options, and a comprehensive manual. Rated as a "must have" program by many computer magazines, retailers report that new customers are purchasing complete computer systems just to use VISICALC! Available on disk for the Apple II+ with 48K; the Apple IIe with 64K; and the IBM PC with 64K.

6H-436278 VisiCalc (Apple II+) $250.00
6H-436279 VisiCalc (Apple IIe) $250.00
6H-437431 VisiCalc (IBM) $250.00

VISIFILE

VISIFILE provides an easy, efficient way to manage and find information quickly. With this program you can collect data and information, organize it into a standard format, and store it as a "file" for later retrieval. The data in these "files" can be sorted in alphabetic and numeric order and printed on reports using formats of your specification. VISIFILE allows you to change the structure of a file (such as changing zip codes from five digits to nine) without having to re-enter your data. Other features include full menu control; 232 characters per record, with up to 24 fields; and easy data transfer capability with the VISICALC program. If you're looking for complete flexibility and sophistication in a data management program, VISIFILE is it. Available on disk for the Apple with 48K and the IBM PC with 64K.

6H-2302 VisiFile (Apple) $260.00
6H-2312 VisiFile (IBM) $260.00

PERSONAL ACCOUNTING SYSTEM

A personal accounting system which keeps track of tax deductible and other expenditures to make budget planning and tax preparation a snap. The standard account structure is complete down to Keogh/IRA deductions and may be tailored to special user needs. Available for the Apple II with 48K and disk.

2R-D027A Personal Accounting System $59.95

ENERGY MONITOR

If tracking school energy consumption is part of your job, ENERGY MONITOR should be too. This unique program is designed to report energy use in from one to ninety buildings, providing invaluable assistance in the development of an energy conservation program. Six, easy-to-read reports detail the electric, oil, and gas usage and costs for each building on a month-to-month basis; energy efficiency can be rated per square foot, per occupant, dollars per square foot, or dollars per occupant. Among the other uses for ENERGY MONITOR are the identification of energy billing errors, verification of invoices, forecasting of energy needs, and pinpointing of areas in need of conservation activity. A step-by-step manual accompanies this easily-learned package. Available on 48K disk for the Apple II and TRS-80; an 80-column printer is required.

2E-15601 Energy Monitor (Apple) $245.00
2E-15603 Energy Monitor (TRS-80) $245.00

SUPER TEXT

SUPER TEXT is a comprehensive word processing program that can save you hours of time in composing and correcting any type of written document. Word processing allows you to create letters, reports, handouts, and forms directly on the computer screen; correct or modify any portion quickly and easily; print out the entire page or manuscript; and save it on disk. If you have a later correction or change, you simply recall the document from your disk, move the cursor to the spot where you want to make the adjustment, and correct it, just like that! You can then reprint the entire document at the touch of a key. Composing material is a simple task when you can move whole sentences and paragraphs to different locations and view it all right on the screen. SUPER TEXT includes all of the professional word processing features, such as automatic word overflow; automatic tabbing and indentation; left and right justification; search and replacement of specific words or phrases; and a choice of 40, 56, or 70 columns across the screen. SUPER-TEXT is the economic and technological successor to the typewriter, providing unprecedented ease in the handling and manipulation of any form of written work. Available for the Apple II with 48K and disk; a printer is required.

6E-120 Super Text $125.00

THE ADDRESS BOOK

THE ADDRESS BOOK allows one to store names, addresses, and telephone numbers and print mailing labels, either separately or in conjunction with the FORM LETTER MODULE (6E-220). Up to 700 names per disk may be stored and sorted in any order. A user definable category system allows you to classify or group records for selective viewing or printing. Available for the Apple II with 48K and disk.

6E-210 The Address Book $49.95

FORM LETTER MODULE

This unique system combines SUPER-TEXT (6E-120) and THE ADDRESS BOOK (6E-210) into a complete form letter system. You can print letters composed with SUPER-TEXT repetitively, each using a mailing address from THE ADDRESS BOOK; or compose individual letters to go with each address. The mailing list information may be inserted anywhere in the letter, in several locations if desired. Special commands also allow you to change the content of individual letters depending upon the recipient. An ideal system for any business or school involved in the creation and mailing of form letters. Available for the Apple II with 48K and disk.

6E-220 Form Letter Module (requires use of 6E-120 and 6E-210) $100.00

ONE-TYPE ACCOUNTING SYSTEM

This is a small, flexible accounting system for posting the income and expenses of a small business or school. It includes a set of 40 standard accounts that may be modified to suit the user's needs. The reporting elements allow a summary of the accounts to date (a trial balance), detail of each account each month, and a full check register with account distribution. The system will post to the checking account, keep track of check numbers, and provide an instant display of the bank balance. Available for the Apple II with 48K and disk.

2R-D025 One-Type Accounting System $59.95

PAYRECORD

This program is a modular addition to the ONE-TYPE ACCOUNTING SYSTEM (2R-D025) which can also be used independently if desired. The latest tax tables and Social Security formulas are incorporated to handle weekly, bi-weekly, semi-monthly, and/or monthly payrolls. User-defined deduction fields allow for state income tax, disability, union dues, and/or health insurance to be deducted and accumulated each pay period. The system will handle regular salary payments, special or bonus payments, or hourly payments, including a mix of all three. A documented audit check system is included. When used in conjunction with the ONE-TYPE ACCOUNTING SYSTEM the user may directly post payroll expenses. Available for the Apple II with 48K and disk.

2R-D023 Payrecord $69.95

PFS: SCHOOL RECORDKEEPER SYSTEM

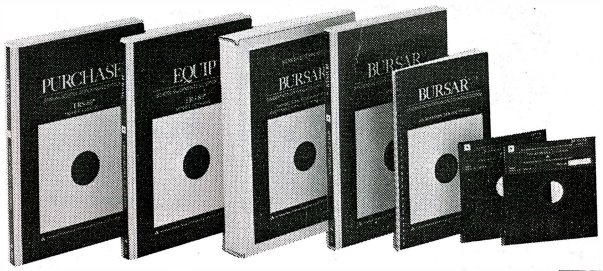
Take the school recordkeeping paperwork off your staff's desks and put it in the computer where it belongs! This system will allow your office staff to file, retrieve, and process the vast quantities of information that you juggle everyday. Almost right out of the box it can produce 30 reports that cover student record management; student emergency information; mailing lists; budget, expense, and balance reports; requisition and purchase order analyses; event calendars; revenue reports; property and equipment management reports; class schedules; teacher and student location lists; and more. Designed to be used by non-computer buffs, PFS: SCHOOL RECORDKEEPER is simple to learn and very flexible. Included in the system are the popular programs PFS: FILE, which is a comprehensive data base program; and PFS: REPORT, which is a data reporting program. The complete system is available in separate versions for the Apple II+ and Apple IIe, with 48K and disk.

8M-100A PFS: School Recordkeeper (Apple II+) .$400.00
8M-100E PFS: School Recordkeeper (Apple IIe) ..$400.00

DATA PLOT

Creating color graphs and charts is easy with DATA PLOT. Using simple menu selections and your own data, you can create bar charts, single and multiple line charts and pie charts, including individual or cumulative plotting. Graphs can be outputted as hard-copy if you have a graphics-capable printer, or saved as high resolution "pictures" for dramatic full-color recall as visual aids during presentations. Available for the Apple II with 48K and disk.

6E-155 Data Plot $59.95



BURSAR

BURSAR is an accounting system designed specifically for student activity-funds; it is easy to operate and requires no accounting background. The system keeps track of funds generated by such extra-curricular activities as athletic teams, marching bands, newspapers, yearbooks, scholarships, and student councils. Some of BURSAR'S features include financial statements for each activity; trial balances and monthly statements; complete account and transaction management; print-outs of receipts and reports; and more. Included in the comprehensive documentation is a glossary of relevant accounting and computer terminology. BURSAR is the ideal system for handling student accounts! Available on 48K disk for the Apple II and TRS-80. "... recommended for any school administrator or district ..." — *ELECTRONIC LEARNING.*

2E-583 Bursar (TRS-80) $195.00
2E-575 Bursar (Apple) $195.00

EQUIP

EQUIP is a school equipment inventory system designed specifically for educational users. It enables administrators or media specialists to allocate, locate, and account for all the physical assets of a department, school or school district. With this system you can maintain accurate inventory records for up to 1200 pieces of equipment and their individual specifications; schedule and monitor equipment usage; verify losses in case of fire, theft, or vandalism; develop maintenance schedules; facilitate equipment borrowing between teachers, departments, and schools; print reports for government or insurance agencies; recognize and justify equipment needs; and more. The documentation covers all aspects of how to operate the system, including a table of error messages. Available on 48K disk for the Apple II and TRS-80.

2E-584 Equip (TRS-80) $195.00
2E-571 Equip (Apple) $195.00

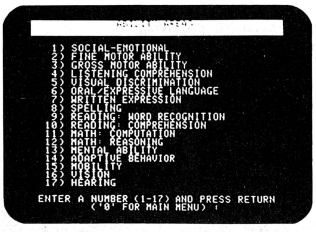
PURCHASE

PURCHASE makes a school's annual ordering process a cost-effective system. It simplifies the bulk purchase of items as varied as instructional and art supplies, science equipment, paper goods, custodial products, physical education equipment, and, (of course) computers. PURCHASE compiles specifications, computes quantities, and can print all the necessary forms, including bid specifications, purchase requisitions, and purchase orders. The system provides the flexibility to meet almost any user needs, and can be used for a single department, a school, or an entire school district. The utilization of a standard system can promote a clearer understanding and appreciation of the purchasing process on the part of your staff. Available on 48K disk for the Apple II and TRS-80.

2E-585 Purchase (TRS-80) $195.00
2E-572 Purchase (Apple) $195.00

2E-580 School Management Set (3 titles above, Apple) $570.00
2E-570 School Management Set (3 titles above, TRS-80) $570.00

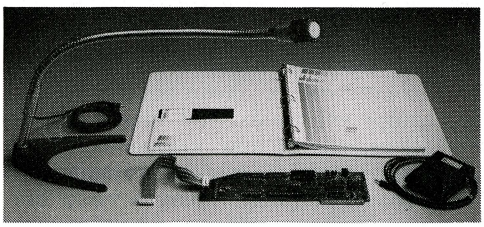
Special Education Instruction



UNISTAR I— IEP DEVELOPMENT

UNISTAR I is a microcomputer assisted approach to developing Individual Educational Programs (IEP's); it is designed for use with students who have learning disabilities and those who are high risk but not labeled. Much of the information required for proper evaluation of an IEP program can be quantified and placed in a standardized, time-saving format using UNISTAR I for the use of IEP program coordinators. Over 700 goals and objectives are described in the program, allowing for a high degree of flexibility in constructing the final IEP. The system contains all of the components required to meet P.L. 94-142, and is organized into the following sections: school identification, student identification, IEP identification, present level of performance, annual goals, short-term instructional objectives, specific educational services, participation in regular educational programs, evaluation procedures and criteria, team participants, school system approval and parent participation. Discrepancy statements that reflect the policies of the Office of Special Education of the U.S. Department of Education are available as a system option. UNISTAR I is available on disk for the Apple II and TRS-80 with 48K, and the IBM with 64K; a comprehensive manual and back-up disks are included.

8N-100AD **Unistar I (Apple)** **$425.00**
8N-100BD **Unistar I (IBM)** ..... ***New*** **$425.00**
8N-100TD **Unistar I (TRS-80)** ..... ***New*** **$425.00**



VOICE INPUT MODULE

Here is a revolutionary product for use on your Apple II computer. No longer must you be tied to the keyboard, as you now have the freedom to SPEAK to your computer! This unit will allow anyone to speak words or phrases to their computer and have them converted to commands that any Apple program will understand. Imagine the possibilities for the physically handicapped or for those who have difficulty with the keyboard! The VOICE INPUT MODULE will take each person's audible words or phrases and their digital equivalents and create reference patterns specific to that person's voice, which are then saved on disk. Thereafter, any application program can be run by that person using voice control instead of the keyboard. Over 98% accuracy is obtainable with this system, which can handle up to 80 discrete words per program. The complete system includes the VOICE INPUT MODULE on a standard Apple expansion slot card; a microphone with stand; utility software on disk; connecting cables; and a user's manual. The unit is fully warranted by the manufacturer; separate versions are available for the Apple II+ and Apple IIe.

4V-VIM2P **Voice Input Module (Apple II+)** **$995.00**
4V-VIM2E **Voice Input Module (Apple IIe)** **$1075.00**

PROFESSIONAL CONCEPTS AND TERMINOLOGY

The concepts and terminology of a profession are the foundation of conceptual understanding. This unique teacher in-service series, designed by educators, administers a multiple-choice knowledge assessment test on general instructional skills and special education topics. It can be used to ensure that new employees have the requisite knowledge for specific assignments, to monitor teachers' on-going training progress and as a comprehensive reference system. More than 400 tutorials are available in the five packages described below. All programs require an Apple II with 48K and disk.

LP-8307 **Instructional Skills** **$175.00**
The five disks in this package contain 125 tutorials on Mathematics, Reading, Language, Career Education, and Vocational Education.

LP-8302 **Special Education A** **$175.00**
This package contains six disks with 125 tutorials covering General Special Education Terms, Legislative and Legal Terms, Services and Programs, Assessment, and Instructional Planning.

LP-8303 **Special Education B** **$140.00**
Package B contains five disks with 100 tutorials covering Learning Disabled, Mentally Retarded, Gifted, and Emotionally Disturbed.

LP-8304 **Special Education C** **$140.00**
Five disks with 100 tutorials covering Physically Handicapped, Hearing Impaired, Visually Impaired, and Speech and Language.

LP-8301 **Vocab** **$125.00**
This package allows trainers and educators to develop their own tutorials for customizing their in-service program.

LP-8300 **Concepts and Terminology Series (25 disks, 450 tutorials)** **$699.95**

STUDENT MANAGEMENT SYSTEM FOR SPECIAL STUDENTS

NEW

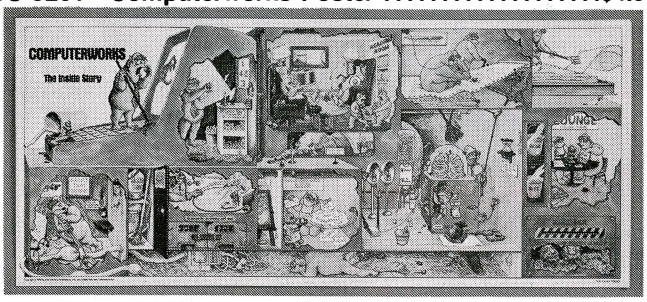
Teachers, special education directors, and other staff members can maintain and manage comprehensive information for students in special education with this software package. Includes items such as test scores, type of handicaps, and student progress toward the achievement of specified goals and objectives. The program contains full editing features to make data entry fast and efficient, and performs both single and multiple variable analysis. Analyses, class lists, address labels, and information about specific students can be printed out. The package includes a step-by-step manual and accomodates up to 1000 students. Available on 48K disk for the Apple II and TRS-80. An invaluable tool for all involved in special education!

4W-100AD **Special Student Management (Apple)** **$499.00**
4W-100TD **Special Student Management (TRS-80)** **$499.00**

COMPUTERWORKS POSTER

Intrigue the computer novice and delight the computer buff with this whimsical COMPUTERWORKS poster. The more your students learn about computers, the more inside jokes they'll discover! This full color, 35″ × 15½″ poster comes rolled in a mailing tube; it's just the thing for your computer lab wall!

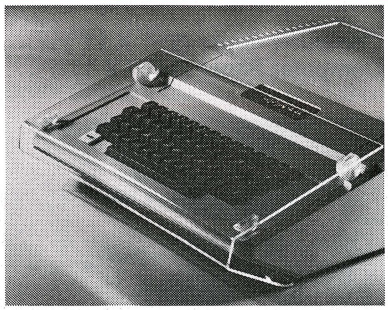
DS-5201 Computerworks Poster $4.95



APPLE JOYSTICKS AND PADDLES

These are excellent additions to any Apple computer system! These sturdy units will provide hours of enjoyment with the many games and educational programs that utilize joysticks and paddles for input. All models have fast and easy connections to the Apple computer. The joysticks feature self centering, trim adjustments, two large pushbuttons, and an attractive case that matches the color of the Apple. The paddles come as a pair, with large rotating knobs and side-mounted pushbuttons. Separate versions are available for the Apple II+ and the Apple IIe.

6H-190 Apple II+ Joystick $59.95
6H-195 Apple IIe Joystick $59.95
6H-200 Apple II+ Game Paddles $39.95
6H-205 Apple IIe Game Paddles $39.95



PLEXA-LOK KEYBOARD PROTECTOR

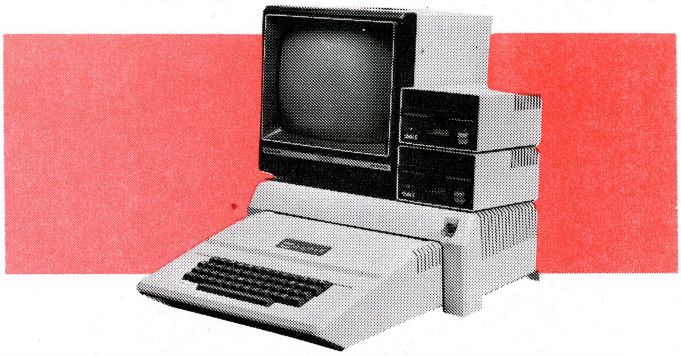
PLEXA-LOK is a clear acrylic cover that slips over the keyboard of your Apple II or TRS-80 Model III computer and snaps in place. It protects the keyboard from falling objects or spilled liquids, and can keep little fingers at bay when they should be engaged upon some other task. The computer can also remain powered up, so that a screen image that is displayed cannot be disturbed by keyboard action. Protect your equipment from classroom hazards with this sturdy unit!

5T-LKA Apple Plexa-Lok Keyboard Cover $24.95
5T-LKT TRS-80 Plexa-Lok Keyboard Cover $24.95

BASF DISKS

For all your programming and data storage needs, these high-quality diskettes will prove outstanding and durable. Single-sided, single density, soft-sectored, and packaged 10 to a box. Suitable for any 5¼″ disk drive.

6H-4256 10-Pack BASF Disks $35.00



APPLE STATION II

Protect your microcomputer investment with this unique system! The STATION II is designed to secure, organize, and simplify your Apple II computer. When the STATION II is bolted to a desk, your Apple can be locked inside using a key; the same key powers up your entire system simultaneously (including the monitor). This unique feature allows you to prevent unauthorized use by locking the unit off, while protecting the computer and it's peripheral cards from theft. The entire unit is designed for heavy-duty use, and the three built-in power outlets feature surge suppression to prevent damaging voltage spikes. All power cords and cables tuck away neatly inside, leaving just one power cord for you to plug in. If your disk drive cable is shorter than 25″, you will need the Disk Extender Cable Kit. A Station Security Kit is available separately which utilizes a flexible steel cable that can attach to a heavy fixture; this allows you to secure STATION II without bolting it to a desk. Also available is a Disk Security Kit to secure a drive to the Station II.

8V-100 Apple Station II $155.00
8V-110 Disk Extender Cable Kit $21.00
8V-120 Station Security Kit $45.00
8V-130 Disk Security Kit $29.00

LEMON & LIME SURGE PROTECTION DEVICES

If you've ever experienced the frustration of losing a program due to a power surge, such as when an air-conditioner starts or the power company adjusts its output, you'll not regret the investment in a surge-protection device. These useful units can protect your computer against unwanted spikes or drops in the current reaching your equipment, thus preventing accidental loss of student's work or your own program data. Both units feature 6 three-prong grounded sockets for connecting computers and peripherals; the LIME unit includes a special switch for turning the power on or off to all six lines simultaneously. Why risk losing valuable work? Get a LEMON or a LIME today!

6H-671367 Lemon Surge Protector $59.95
6H-671143 Lime Surge Protector (with switch) $89.50

POWER STRIPS

If your computer stations suffer from tangled power cords and not enough sockets to handle the equipment, then these heavy-duty power strips are just the thing for you. Each UL-listed power strip contains 6 three-prong grounded sockets and a lighted master switch that activates all of the outlets. Two models are available, one with a six foot cord and the other with a fifteen foot cord. Keep things neat, organized, and safe with these practical units!

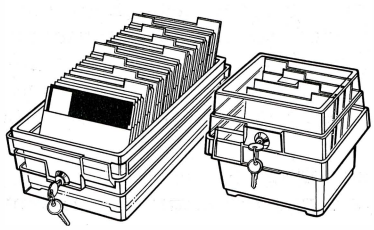
6H-615109 Power Strip, 6′ Cord $25.00
6H-615341 Power Strip, 15′ Cord $29.00

Computer Accessories

MOBILE MICROCOMPUTER STATIONS

Priced for economy, designed for education, made for functional usability, these heavy-duty units are equally at home on the move between classrooms or as permanent stations in one location. Model EC10, pictured above, features a roomy 36″ X 24″ work surface that will accommodate a complete microcomputer system with the monitor on the 36″ X 12″ top shelf. The work surface height is adjustable, as is the top shelf for easy eye-level viewing of the monitor. Construction is of heavy-gauge steel with 1″ square chrome tubular legs, 4″ casters (2 with locking brakes), and a high-impact baked enamel finish for long-lasting wear. A 3-outlet electrical accessory unit, a 20 foot extension cord, and a power cord organizer compartment behind the modesty panel keep your computer system neat and orderly. Model EC15 is identical to EC10 with the addition of a lighted master switch along the front panel, allowing you to turn on all of your computer components with a single switch. Model EC5 has the same features as EC10 but without the top shelf, allowing it to acommodate computers with built-in monitors such as the Pet and TRS-80. The MOBILE MICROCOMPUTER STATIONS are the ideal solution for your computer lab!

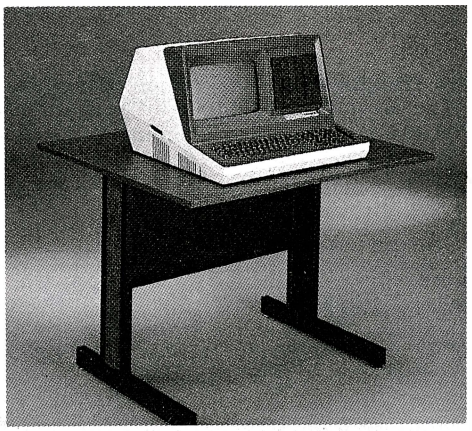
2S-EC10 Mobile Microcomputer Station (with top shelf) $275.00
2S-EC15 Mobile Microcomputer Station (with master switch) ..... *New* $285.00
2S-EC5 Mobile Microcomputer Station (no top shelf) $245.00



DISK FILE BOXES

These high-quality 5¼″ disk file boxes are molded of heavy-duty anti-static plastic, with lids of high-transparency smoked acrylic plastic. Key-locking removable lids can be fitted underneath the base to conserve work space. The dividers may be removed or snapped into position to prevent the disks from shifting. Two models are available: M35 holds 40 disks and is 8⅜″ long; M85 holds 90 disks and is 14⅛″ long. Both are 7½″ wide and 6½″ tall. Organize those disks today!

3U-M35 Disk File Box (40 disks) $29.00
3U-M85 Disk File Box (90 disks) $49.00



MICROCOMPUTER TABLE

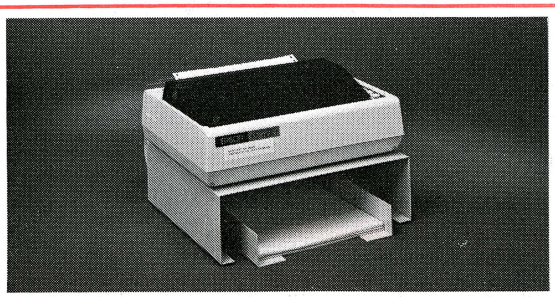
One of the secrets to maintaining an efficient and orderly computer lab is to have your equipment arranged for maximum productivity. These 36″ wide microcomputer tables make it easy to provide students with plenty of work area while allowing flexibility in utilizing classroom space. The mar-resistant woodgrain top is 30″ deep; the legs are of heavy-duty steel for strength and longevity and provide a standard 26½″ working height. Don't be forced to "make do" with inadequate furniture to hold your computer lab's equipment; these units are the perfect match for any microcomputer!

2S-CR3036 Microcomputer Table $188.00

COMPUTER PAPER

Don't settle for cheap computer paper that tears and jams in your printer. This heavy-duty paper is designed for rugged use in all tractor and pin-feed printers. Two sizes are available, 9½″ × 11″ (with perforations for tear-down to 8½″ × 11″) and 14½″ × 11″. Paper weight is 18 lbs., with 3000 fan-fold sheets per box.

6H-951476 Computer Paper (9½″ X 11″) $43.50
6H-951817 Computer Paper (14½″ X 11″) $64.50



PRINTER STANDS

These heavy duty printer stands are designed for 80-column and 132-column printers. If you've ever experienced the frustration of trying to work on an over-cluttered desk or work station because you had to have printer paper stacked behind the printer, or crawled under the table because the paper was stacked on the floor, you'll appreciate the value of a printer stand. These durable steel units hold the printer up 5″ above your work surface, with the paper stacked underneath and feeding directly out behind. Two models are available, 2S-PS1 which is 14¾″ wide and 13″ deep; and 2S-PS2 which is 21″ wide and 13″ deep. Not only will you gain more work room, a neater appearance, and easier paper handling, but your paper will also feed better and resist jamming with the unique guide-rails included with each stand.

2S-PS1 Printer Stand (14¾″) $34.00
2S-PS2 Printer Stand (21″) $46.00

COMPUTER DUST COVERS

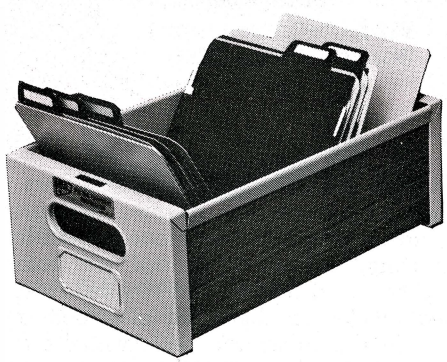
Insure lasting protection of your computer equipment with these quality dust covers for popular computers and peripherals. Manufactured from heavy vinyl fabric that allows your equipment to 'breathe' but keeps dust and moisture out. Each cover features a precise tailored fit and cut-outs for cables and fixtures (such as printer paper racks, etc.). All covers are machine sewn for maximum strength. An economical investment to protect your school's computers.

8D-06850	Apple Keyboard/Computer	$9.95
8D-07150	Apple Single Disk Drive	$9.95
8D-07300	Apple Combo: Computer, two stacked disk drives, Sanyo 9" monitor	$14.50
8D-09600	Atari 800 Computer	$9.95
8D-09750	Atari 810 Disk Drive	$9.95
8D-16400	Pet/CBM 4016/32 Computer w/12" screen & 8032 Computer	$14.50
8D-16250	Commodore 64 Computer	$9.95
8D-54350	TRS-80 Model III Computer	$14.50
8D-37600	IBM PC Computer & Monitor (2 cover set)	$16.95
8D-28500	Epson MX/FX-80 Printer	$9.95
8D-28650	Epson MX/FX-100 Printer	$9.95

DISCSAVERS

DISCSAVERS are vinyl sleeves that protect your disks from handling hazards while providing a convenient filing system. The soft vinyl is strong and durable, and will not wear out or tear like paper sleeves. They are packed 12 to a box, with three each of red, blue, green, and yellow, allowing for the implementation of a color-coding system for your disks. Each color might be used to represent a different subject, a sequence of programs, or to distinguish instructional disks from teacher utilities. They are also ideal for quick reference by younger students, who will find it easier to get "the red disk," rather than "Spelling Lesson Program, Disk 1."

7T-20 Discsavers (box of 12) $5.95



MINI-MATIC DISK TRAY

Specially designed to hold 5¼" diskettes, the MINI-MATIC offers protection, easy access, and accurate re-filing of your computer disks. It is light-weight but of durable welded-steel construction, with a capacity of up to 50 disks. Includes index dividers, three supporting tilt plates, and a dust cover. For additional security, an optional locking steel hood is also available separately.

6K-MM1T Mini-Matic Tray $33.50
6K-MM1H Locking Hood for Mini-Matic $36.00

KOALAPAD TOUCH TABLET NEW

Set your students' imaginations loose with the KOALAPAD! This fascinating unit turns your computer into a finger-tip video sketch pad! The 4"-square touch-sensitive surface of the pad, in conjunction with the comprehensive graphics program that is included, permit a degree of flexibility and ease of use unparalleled by any other software package. Create perfect circles of any diameter, boxes of any shape, draw lines at any angle, draw free-form, color and shade objects, change the cursor's "brush" strokes, and more, all at the touch of a finger! The KOALAPAD provides children and adults with a creative outlet that is limited only by their imaginations. (Our staff lined up to take turns with the KOALAPAD!) Available with software on disk for the Apple II and Atari with 48K, and the IBM and Commodore 64 with 64K; interface connections are included.

5D-100AD	KoalaPad (Apple)	$124.95
5D-100BD	KoalaPad (IBM)	$149.95
5D-100CD	KoalaPad (C64)	$99.95
5D-100RD	KoalaPad (Atari)	$99.95

DISCOFLEX FLOPPY DISK HOLDER

A new means of organization for your diskettes! The DISCOFLEX is a fan-fold desk box that holds up to 20 diskettes in transparent pockets for fast access. The box folds up into a neat, enclosed folder secured with a sturdy metal latch. Now you can have organized storage and quick retrieval of your diskettes along with complete protection. Dimensions are 5" high, 5½" wide, and 2¼" deep closed; when open the depth is 9½".

3F-5172 Discoflex Diskette Box $26.95

DISK DRIVE HEAD CLEANER

If you find that your disk drive seems temperamental about booting your disks, it may have dirty heads that prevent accurate disk reading. The DISK DRIVE HEAD CLEANER is a quick and easy solution. Utilizing a special cleaning disk, you can remove up to 90% of the debris that commonly contaminates your disk drive heads. There is no mess and your heads are completely safe.

3Z-6152 Disk Drive Head Cleaner $29.95

CASSETTE CASE

A sturdy plastic case for storing your computer cassettes. Each case holds twelve tapes, stored in their individual plastic boxes (not included) for additional protection. Organize your cassette library with this efficient and safe storage system. Dimensions are 12¾" high, 10½" wide, and 2" deep.

3F-5190 Cassette Case $16.00

OLD IRONSIDES

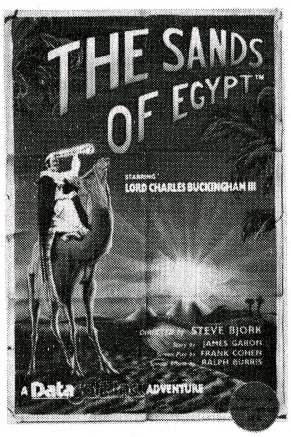
This game is a 2-player naval battle with animated sailing ships firing broadsides at each other! It features some of the most advanced animated graphics available for the Apple II. Tactics include ramming, forcing your opponent to use up ammunition, and hiding in the fog, all the while contending with wind direction, clouds that obscure your view, and more! All of the high resolution shapes move freely over full-color graphic backgrounds for unprecedented realism. Available for the Apple II with 48K and disk.

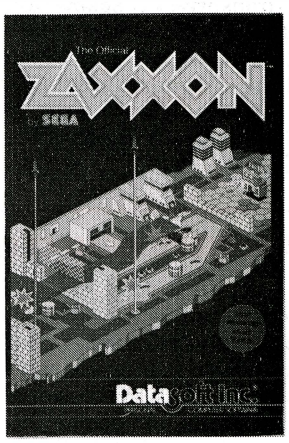
9H-300AD Old Ironsides $39.95

SANDS OF EGYPT NEW

If you can't take the heat, you won't stand a chance in the SANDS OF EGYPT. You are the only remaining member of a British Expedition searching for the lost treasures of ancient Egypt. You hope to unlock the hidden secrets of the sand, and live to tell about it! This unique adventure game utilizes a split screen; while describing the wonders of the desert in the lower half of the display, the upper half paints a detailed picture of each move in high resolution graphics. Search for water, encounter camels, puzzle over pyramids, and discover the many mysteries of the desert! Available for the Atari with 32K and disk; age level is 12 and up.

3D-1180D Sands of Egypt $29.95





ZAXXON NEW

One of the most popular arcade games ever produced, ZAXXON combines totally unique color graphics and sound with unprecedented 3-dimensional effects. You'll maneuver your ship through a battlefield of enemy missiles, anti-aircraft tanks, a fleet of enemy planes, and finally encounter the ZAXXON robot itself. Fast action, fast reflexes, and your thumb on the trigger button characterize this spectacular game. Available on 48K disk for the Apple II and Atari.

3D-1200AD Zaxxon (Apple) $39.95
3D-1200RD Zaxxon (Atari) $39.95

THE ARCADE MACHINE NEW

THE ARCADE MACHINE guides you step by step through the process of designing and producing your own computer arcade game! Draw and animate your own colorful shapes; create dramatic explosions and sound effects; design your own scoring routines; and more! Five sample games created with THE ARCADE MACHINE are included, which you can play and modify as you explore the endless possibilities for designing your own games. The games are automatically created in machine language for fast and smooth arcade-quality animation. Available on 48K disk for the Apple II and the Atari.

4Q-135478 The Arcade Machine (Apple) $59.95
4Q-135494 The Arcade Machine (Atari) $59.95

LAND MONOPOLY NEW

Here is a computerized version of Monopoly with a novel twist. A special feature of the game program lets you input your own street names, thus allowing you to build houses and hotels right on your own street! Just as in the standard board game, two or more players buy and sell property in an effort to become the big tycoon and drive competitors into bankruptcy. A high resolution board, dice, and playing pieces are displayed on the screen. The program comes ready to play with street names from the Los Angeles area, or you can make up your own. Available for the Apple II with 32K and disk; age level is 12 and up.

4B-190753 Land Monopoly $29.95

WORD CHALLENGE NEW

Ready for some mental gymnastics, computer style? Take on WORD CHALLENGE, one of the most advanced, intelligent software game programs available. The object: locate the hidden words in a square of random letters. Your computer opponent possesses an almost human intelligence with a 90,000 word vocabulary, so you'll find yourself in for a knock-down, drag-out intellectual battle! Twenty-six playing levels are available, and the size of the square containing the letters can be selected. This fast, entertaining game will provide hours of fun while building vocabulary, spelling, and problem solving skills. Available on disk for the Apple II with 48K and the IBM with 64K. For ages 12 and up.

7E-100AD Word Challenge (Apple) $39.95
7E-100BD Word Challenge (IBM) $39.95

MICROPAINTER

A state-of-the-art graphics program that allows you to design detailed high-resolution pictures and graphs in 21 colors. Features a magnification mode for dot-by-dot coloring and drawing, and instant control over color selection. Pictures can be saved to disk and recalled. Ideal for creating detailed images or charts for classroom presentation and for art and design instruction. Available on 48K disk for the Atari and the Apple II (DOS 3.2).

3D-1001A Micropainter (Apple) $34.95
3D-1001W Micropainter (Atari) $34.95

U-DRAW II

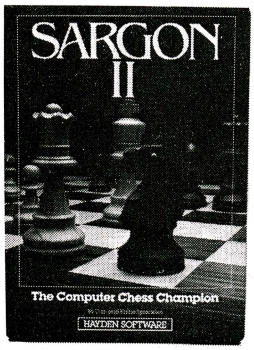
With this useful graphics package, students create figures that can be rotated, expanded, contracted or moved anywhere on the video screen with a few simple keystrokes. Figures can be saved on disk and recalled later. Available for the Apple II with 32K and disk.

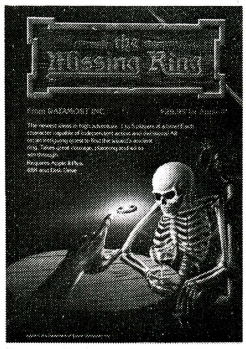
6E-140 U-Draw II $39.95

SARGON II

The champ of champs in computer chess! SARGON has proven itself as the quickest and most proficient microcomputer chess program; its opening book and end game are particularly effective. If you're looking for an intellectual challenge from your computer, SARGON is ready to play your game! Available on disk for the Apple II and the Atari with 32K and the Commodore 64 with 64K; and on cassette for the TRS-80 with 16K. For ages 13 and up.

4J-03409 Sargon II (Apple) $34.95
4J-03419 Sargon II (Atari) $34.95
4J-03430 Sargon II (C64) $29.95
4J-03418 Sargon II (TRS-80) $32.95

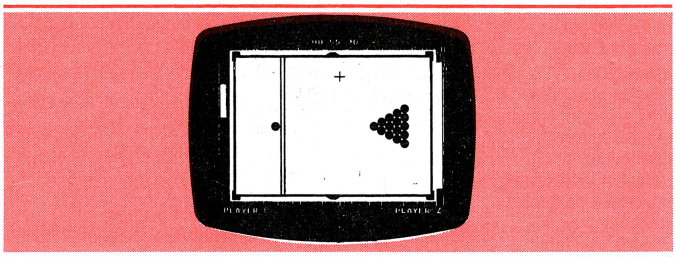




THE MISSING RING

This unique adventure game allows from one to five players to interact simultaneously with the computer. The quest is to find the Wizard's Ring, which has been missing for aeons. Many hazards and traps await the unwary — it will take an extra dose of courage and wit to solve the mysteries of the Enchanted Palace. And the more players that join the quest, the more intriguing and difficult the task becomes! The rooms and characters are all displayed graphically on the screen, and a complete set of command keys are used at each end of the keyboard so that two of the players can journey simultaneously. This excellent program for group activity is designed for the Apple II with 48K and disk.

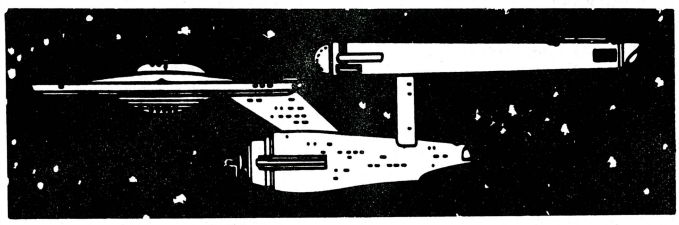
3A-12 The Missing Ring $29.95



POOL 1.5

This high resolution color simulation of billiards is so real it's hard to believe! Each player has complete control over the cue ball, including the direction, speed, even the amount and type of "English" to put on it. The physics of the ball movements, from "breaking" to bouncing into the pockets, are replicated with amazing precision. Also available are slow-motion control and instant replay of any shot. Four popular games are included: *Eight Ball, Straight Pool, Rotation,* and *Nine Ball,* using either "stripes" or "solids." Ranked #2 nationally by Softalk magazine, POOL 1.5 can be enjoyed by 1 to 4 players. Available on disk for the Apple II and the Atari with 48K, and the IBM with 64K; game paddles are required.

6H-2201 Pool 1.5 (Apple) $34.95
6H-2221 Pool 1.5 (Atari) $34.95
6H-2231 Pool 1.5 (IBM) $34.95



THE WARP FACTOR

In this space strategy game you are not only Captain of your ship but can command an entire star fleet, if you wish, in realistic battle simulation against alien vessels! You must control phasers, sheilds, warp engines, and much more, always with a careful eye on your energy supply. An infinite variety of confrontations are possible, ranging from space skirmishes to full-scale intergalactic war, utilizing up to 12 different starship designs from five different Galactic Empires. Play against the computer or zzzap a friend! Available on disk for the Apple II with 48K and the IBM with 64K.

9E-100AD The Warp Factor (Apple) $39.95
9E-100BD The Warp Factor (IBM) $39.95

PAINT

PAINT lets your students expand their creativity and explore the world of art and computer graphics. A joystick is used as a paint "brush" to create exciting graphics with amazing versatility; over 80 different shapes and sizes of brush "strokes" are available, as are hundreds of colors and texture patterns. A "zoom" function allows students to move in close to a particular section of their painting for exact placement of their "brush". A variety of pre-programmed shapes can be utilized including circles and squares. A 100 page book in included that describes the program and provides suggestions for picture ideas and projects. Available for the Atari with 48K and disk.

8P-5425 Paint $39.95

SUPER SHAPE DRAW AND ANIMATE

Superb high-resolution graphics are easily created with this comprehensive package. Entirely menu-driven, with up, down, left, right and diagonal moves made at the touch of a key. Allows students to store and edit shapes, and even animate them! An excellent value in easy-to-use graphics. Available for the Apple II with 48K and disk.

2C-2420 Shape Draw & Animate $34.95

FORTE

Music lovers, take note! FORTE is an interpretive language program that is devoted to the playing and writing of music. Utilizing this package, you can write your own 'program' of music that would ordinarily take hours of calculations and coding to do in standard Applesoft. Music programs are easy to enter and edit, and can be saved on disk or printed out. Songs that you have created can be played back either through the Apple's internal speaker or through an external amplifier using the cassette output port. FORTE was designed to be easy and fun for the beginner, yet is capable of handling the most complex passages a veteran musician can devise.

8A-53 Forte (Apple, 48K, disk) $29.95

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FINANCING A CAR

NEW

Here's an effective and efficient way to teach about credit and purchasing. Students will learn how to evaluate financing options working with such factors as the cost of the car, the down payment, interest rates, and length of the loan. Financial comparison sheets will help them determine the most cost effective way to arrange financing. The program can also be used to help make credit decisions in the event of an actual car purchase. Grade level is junior high and up; available for the Apple II with 48K and disk.

4V-231AD Financing a Car $44.95

COMPARATIVE BUYING SERIES

This personal and consumer economics series explains and develops concepts of comparative buying for the special needs student. The following programs are included in the set: *Buying Wisely,* which introduces and reinforces the basic concepts of comparative buying; *Becoming An Informed Shopper,* which provides information buyers should use to arrive at judgements of quality and value; *Understanding Sales Buying,* which identifies the major types of sales and their characteristics, including pricing and impulse buying; and *Cash Versus Credit Buying,* which analyzes cash and credit buying options. Instructor control of sound and reading speed is featured; four diskettes and additional supplemental printed materials are included. Available for the Apple II with 48K.

4V-70 Comparative Buying $165.00

MANAGING LIFESTYLES

NEW

Strengthen basic math skills by involving your students in daily life situations. *Diet* allows students to plan a day's meals according to their calorie requirements and then rates their menu plans. In *Comparison Shopping,* small groups of students cooperate in planning a week's supply of groceries within the tastes and budget of a family of four. *Budget* allows students to examine some of the decisions they have to make about college, jobs, marriage, children, houses, and cars. Grade level is 6 and up; available on 48K disk for the Apple II and TRS-80. A back-up disk and a teacher's guide with reproducible worksheets, transparencies, and student activities are included.

8K-1140AD Managing Lifestyles (Apple) $49.00
8K-1141TD Managing Lifestyles (TRS-80) $49.00

BASIC SKILLS FOR SPECIAL NEEDS

This series of microcomputer programs, designed for the secondary special needs student, utilizes controlled branching based upon the student's input; incorrect responses will prompt the display of text in progressively easier-to-understand language and will increase the use of graphics reinforcement of the basic concept. Designed by a Ph.D. in Special Education, these programs make full use of the computer's unique capabilities for the special student. Each program comes in a three-ring binder with supplemental materials for the instructor, including lesson plans, course outlines, and more. All programs are for Apple, 48K, disk. "These products were obviously created with input from educators familiar with current learning theory." — *INFOWORLD.*

4V-10 Money Management Assessment $165.00
This unique program assesses the basic skills needed to learn effective money management. Includes tests on vocabulary, concepts and functions, calendar relationships, money symbols, and the mathematical skills needed to manage money accurately. The results will assist the teacher in the implementation and evaluation of subsequent money management instruction. Four diskettes and reproducible worksheets.

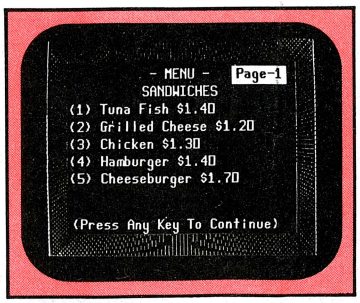
4V-20 Income Meets Expenses $340.00
Introduces students to the concept of budgeting by learning about income and its relationship to fixed and flexible expenses based on needs and wants. Presents a comprehensive budgeting model for the student, which is reinforced by worksheets related to the computer program. Includes 8 diskettes and 20 each of four different worksheets.

4V-30 You Can Bank On It $285.00
This informative program introduces the basic concepts of banking. Topics covered include how to open a savings account, depositing and withdrawing money, how to start a checking account, and how to write checks and keep records. Includes six diskettes and 20 each of 10 different worksheets.

4V-40 Job Readiness $165.00
An innovative program that combines the techniques of assessment and instruction to develop the student's understanding of job readiness skills. Includes practical knowledge such as filling out job applications, job interviews, and placement agencies. Includes four diskettes and reproducible worksheets.

4V-100 Basic Skills Series (Set of 4) $914.95

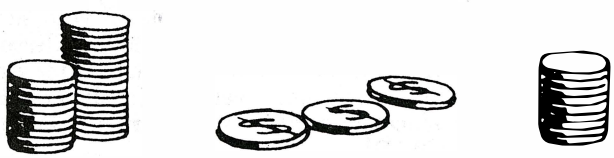
Survival Skills



MATH FOR EVERYDAY LIVING

Real-life math and business skills are taught with this progressive tutorial and practice program. The student is given choices to make in simulation-type activities that cover making change, working with sales slips, unit pricing, gas mileage, sales tax, wages, overtime, piecework, and more. Ten reproducible activity masters are also included with the program to reinforce concepts. Available on 48K disk for the Apple II and TRS-80; on 64K disk for the Commodore 64; and on 8K cassette for the Pet. Back-up disks are included.

3K-200AD Math for Everyday Living (Apple) $99.00
3K-200CD Math for Everyday Living (C64) $89.00
3K-200PC Math for Everyday Living (Pet) $99.00
3K-200TD Math for Everyday Living (TRS) $99.00



BUDGETING

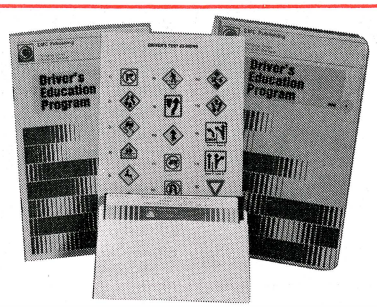
A two-program set that covers the basics of budgeting. One is a tutorial that will help your students understand what a budget is and why it is important; how to set goals; how to deal with income and expenses, both fixed and variable; and the importance of saving. A case study approach gives students practical experience with budgeting. The second program is a simulation, with the student working on an annual budget for a real-life problem. Both programs are available for the Apple II with 48K and disk, and come with back-up disks; grade level is junior high school through adult.

2G-9113 Budgeting $160.00

ANALYZING AN AD

Teach students how to avoid advertising exploitation and understand how ads are created. They will examine their buying decisions while exploring the dynamics and mechanics of advertising. The program allows students to create their own ads and includes colorful graphics, worksheets, and suggestions for stimulating activities. Grade level is junior high to high school; available for the Apple II with 48K and disk. "Highly recommended and very useful..."—*FORECAST MAGAZINE.*

4V-221AD Analyzing an Ad $44.95



DRIVER'S EDUCATION PROGRAM

Traffic regulations, safety, and driver's test preparation are covered in this testing program for high school students. The rules correspond to those most common throughout the United States. High resolution graphics provide reinforcement for correct answers; a percentile score is displayed at the conclusion of each section. Available for the Apple II with 48K and disk.

2G-96956 Driver's Education Program $49.00

THE MONEY MANAGER

THE MONEY MANAGER is a set of personal finance simulations for high school students. Many of the concepts that students need before entering the working world are here presented in one comprehensive learning module. The topics covered include budgeting, banking services, credit, insurance, consumer purchases, and taxes. A special section is also included on how to deal with unexpected events. Available for the Apple II with 32K and disk; a student workbook is available separately.

8B-166AD The Money Manager $74.95
8B-167 Student Workbook for Money Manager .. $4.95

DEVELOPING BASIC SKILLS

This reading-context series covers contemporary basic skills in consumerism, self-concepts, personal finances, and work habits. Students read screen text material and answer multiple-choice questions after each section; incorrect responses prompt a reinforcement branch using an alternate approach. The programs incorporate graphics and sound, and are available on disk for the Apple II with 48K and the TRS-80 with 32K; and on 16K cassette for the TRS-80. A teacher's guide is included with each unit.

CONSUMER SERIES

Contains eight programs: *Tips on Buying a Used Car, Reading an Advertisement, Consumerism and You, Shopping in a Comparative Way, Laws for Consumers, Consumer Fraud, Consumer Help,* and *Understanding Labels.*

7P-320A Consumer Series (Apple) $235.00
7P-320T Consumer Series (TRS-80, cassette) $199.00
7P-320R Consumer Series (TRS-80, disk) $235.00

PERSONAL MONEY SERIES

Contains six programs: *How to Finance a Car, Money, All About Interest, Metrics and You, Eating for Good Health,* and *Credit.*

7P-220A Personal Money Series (Apple) $175.00
7P-220T Personal Money Series (TRS-80, cassette) $145.00
7P-220R Personal Money Series (TRS-80, disk) $175.00

WORK SERIES

Contains seven programs: *How to Get and Hold a Job, The Job and You, Self-Concept and Your Work, Part Time Jobs, You and Insurance, New on the Job,* and *Interviewing.*

7P-120A Work Series (Apple) $199.00
7P-120T Work Series (TRS-80, cassette) $165.00
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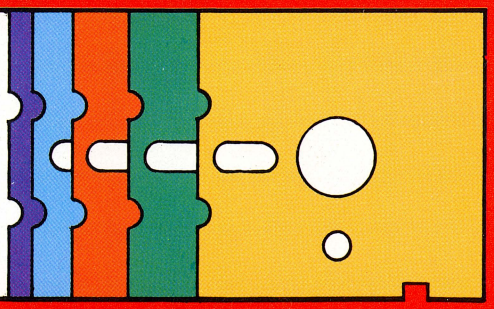

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Career & Survival Skills *Business Education* *Logic & Simulations*

Teachers & Administrators *Social Studies* *Games/Music/Art*

AN APPLE FOR THE TEACHER

This excellent resource is intended for teachers who are new to the Apple II microcomputer. The book is actually a tutor in itself, moving the reader from one level to another with ease. It begins with the basic parts of the Apple computer and its peripherals, and continues into the fundamentals of programming and a discussion of software evaluation. This self-paced volume is perfect for individuals, inservice training, or educational computing courses.

LP-8345 An Apple for the Teacher $9.95

USING A MICROCOMPUTER IN THE CLASSROOM

Here is an excellent introduction to using micros in your school. The authors describe the different types of computer-assisted instruction in use today and show how to integrate computer courseware and programming into the school curriculum. A resource chapter lists useful books, magazines, films, filmstrips, and other teaching and learning aids, as well as evaluations of hardware and software.

8P-8144 Using a Microcomputer $16.95

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